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DATE: May 7, 2012

TO: Jeff Catanzarita, U.S. EPA/ERT *Dennis Miller*

THROUGH: Dennis Miller, SERAS Program Manager *mme*

FROM: Michael Cartwright, SERAS Task Leader

SUBJECT: CABO ROJO SITE, CABO ROJO, PUERTO RICO
FEBRUARY AND MARCH 2012 SUB-SLAB SOIL GAS AND INDOOR AIR SAMPLING
WORK ASSIGNMENT #SER00130 – TRIP REPORT

This trip report contains confidential information as to locations and analytical results of private properties involved in the investigation, and therefore, specific information identifying property locations and results may need to be withheld or redacted prior to release to the public.

BACKGROUND

The Cabo Rojo Site (Site) consists of a groundwater plume that has impacted several public drinking water supply wells in and around the municipality of Cabo Rojo, Puerto Rico (PR). The source of the plume has not been identified. Samples collected by the Puerto Rico Aqueduct and Sewer Authority (PRASA) from 2002 to 2006 have identified the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (DCE) and 1,1-DCE within the Cabo Rojo Urbano System, particularly in the Ana Maria well. EPA confirmed the presence of these contaminants in the Ana Maria well in 2007, and began site reconnaissance activities that included 68 facilities in and around Cabo Rojo. Preliminary Assessment/Site Inspections (PA/SI) were completed at fifteen facilities, 13 of which included soil and groundwater sampling. Although the source of the groundwater contamination was not specifically identified, contamination was detected at D'Elegant Fantastic Dry Cleaners (DEC), Extasy Q Prints (EQP), and Cabo Rojo Professional Dry Cleaners (CRPDC). The Site was listed on the National Priorities List (NPL) on March 10, 2011 (US EPA 2012).

In June 2011, at the request of the Environmental Protection Agency/Environmental Response Team (EPA/ERT) and EPA Region II, Scientific, Engineering, Response and Analytical Services (SERAS) personnel conducted a preliminary remedial investigation (RI) of the Site to confirm or negate possible sources of groundwater contamination based on previous EPA findings and/or suspected sources of contaminants. The analytical results from preliminary RI indicated that there are measurable levels of PCE, TCE, and DCE at four of the 13 Site properties included in the investigation.

In February 2012, SERAS was tasked by the EPA/ERT and EPA Region II to return to the Site to conduct a soil vapor intrusion sampling study at several Site properties that were included in the preliminary RI. The Site properties included DEC, CRPDC, EQP, and Serrano Dry Cleaners II (S2A and S2B).

In March 2012, SERAS was tasked by the EPA/ERT and EPA Region II to return to the Site and expand the soil vapor intrusion sampling study to include 32 additional Site properties.

This trip report details the tasks and results associated with the February and March 2012 mobilizations.

OBSERVATIONS AND ACTIVITIES

Mobilizations

During the week of February 27, 2012, SERAS personnel mobilized to the Site to install a total of 19 sub-slab soil gas wells within the interior of six Site buildings. Twenty-four 24-hour soil gas samples were collected using SUMMA® canisters from each new sub-slab soil gas well and five existing sub-slab soil gas wells. Concurrent with sub-slab soil gas sampling, SERAS personnel collected 21 indoor air samples and 10 ambient air samples using SUMMA® canisters over a 24-hour sampling period.

During the week of March 19, 2012, SERAS personnel mobilized to the Site to install a total of 51 sub-slab soil gas wells within the interior of 32 civic, commercial and residential Site buildings. Soil gas samples were collected from each sub-slab soil gas well using SUMMA® canisters over a 24-hour sampling period. Concurrent with sub-slab soil gas sampling, SERAS personnel collected 59 indoor air samples and eight ambient air samples using SUMMA® canisters over a 24-hour sampling period.

The SUMMA® canister samples were submitted to the ERT/SERAS Laboratory for trace level volatile organic compound (VOC) analysis using EPA Method Toxic Organic (TO-15), *Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*.

Soil Gas and Air Sampling Procedures – February 2012 Mobilization

From February 29 to March 1, 2012, SERAS personnel collected soil gas samples from 19 newly installed and five existing sub-slab soil gas wells. A sample was not collected from a sixth existing sub-slab soil gas well due to an obstruction that prevented soil gas flow. Indoor air samples were collected from 18 locations within the Site buildings. Three co-located indoor air samples and 10 ambient air samples were also collected during the sampling event. Sub-slab soil gas, indoor air and ambient air sampling locations for the February 2012 mobilization are presented on Figures 1 through 4.

Samples were collected using SUMMA® canisters equipped with a restrictive orifice set at a constant flow rate to collect between 4 and 5-liters (L) of sample during the 24-hour sampling period. All SUMMA® canisters and orifices provided by the laboratory were individually certified clean at 0.070 parts per billion by volume (ppbv). The SUMMA® canisters were submitted, with appropriate chain of custody (COC) records, to the ERT/SERAS Laboratory for EPA Method TO-15 VOC analysis. A total of 24 soil gas, 21 indoor air, 10 ambient air and two trip blank samples were submitted for VOC analysis.

The target compound list (TCL) for samples collected at the EQP property included the full TO-15 list, while the remaining samples were analyzed for only PCE, TCE, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-dichloroethane (DCA), 1,2-DCA and vinyl chloride. Reporting limits (RLs) were set at 0.070 ppbv, and sample results were reported in both ppbv and micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Soil Gas and Air Sampling Procedures – March 2012 Mobilization

From March 20 to March 21, 2012, SERAS personnel collected soil gas samples from 51 sub-slab soil gas wells. Indoor air samples were collected from 53 locations within the Site buildings. Six co-located indoor air samples and eight ambient air samples were also collected during the sampling event. March 2012 sub-slab sampling locations are presented on Figure 5.

Samples were collected using SUMMA® canisters equipped with a restrictive orifice set at a constant flow rate to collect between 4 and 5-L of sample during the 24-hour sampling period. All SUMMA® canisters and orifices provided by the laboratory were individually certified clean at 0.030 parts ppbv. The SUMMA® canisters were

submitted, with appropriate COC records, to the ERT/SERAS Laboratory for EPA Method TO-15 VOC analysis. A total of 51 soil gas samples, 59 indoor air samples, eight ambient air samples and a trip blank were submitted for VOC analysis.

The TCL for all samples included PCE, TCE, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCA, 1,2-DCA and vinyl chloride. Samples collected at Site properties Units 7, 9, 12, 13, 26, 27, 28, 29, 30, 31, 32 and 33 were also analyzed for chloroform, benzene, toluene, ethyl benzene, methylene chloride and 1,2,4-trimethylbenzene. RLs were set at 0.070 ppbv for soil gas samples and 0.030 ppbv for indoor and ambient air samples, and sample results were reported in both ppbv and $\mu\text{g}/\text{m}^3$.

RESULTS

Minimum, maximum, mean and median VOC concentrations for the sub-slab soil gas, indoor air and ambient samples can be found in Tables 1 through 3, respectively. Non-detections were not included in the calculation of the summary statistics, which were prepared using SAS[®] statistical software version 9.0. Maps containing sub-slab soil gas PCE and TCE concentrations for the February and March mobilizations can be found in Figures 6 and 7.

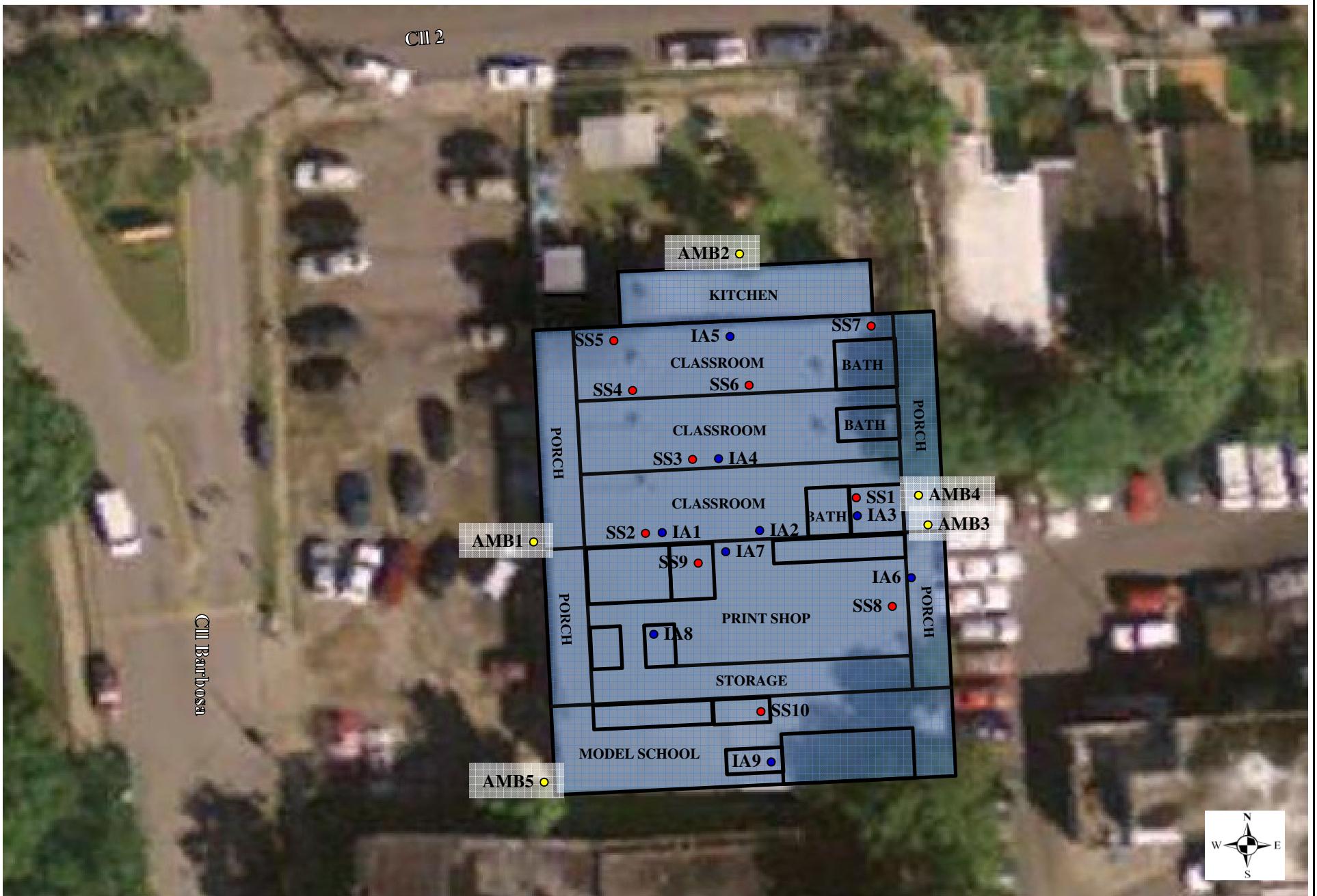
Complete analytical results for the February and March 2012 sampling mobilizations can be found in Appendix A. Appendix B contains the SERAS Air Sampling Worksheets. Appendix C contains the confidential unit to address key.

FUTURE ACTIVITIES

Future activities will be determined by ERT and EPA Region II personnel.

cc: Central File WA SERAS-130 (w/attachments)
 Electronic File: I:\Archive\SERAS\130\D\TR\SERAS-DTR-050712
 Dennis Miller, SERAS Program Manager (cover page only)

FIGURES
Cabo Rojo Site
Cabo Rojo, PR
May 2012



LEGEND

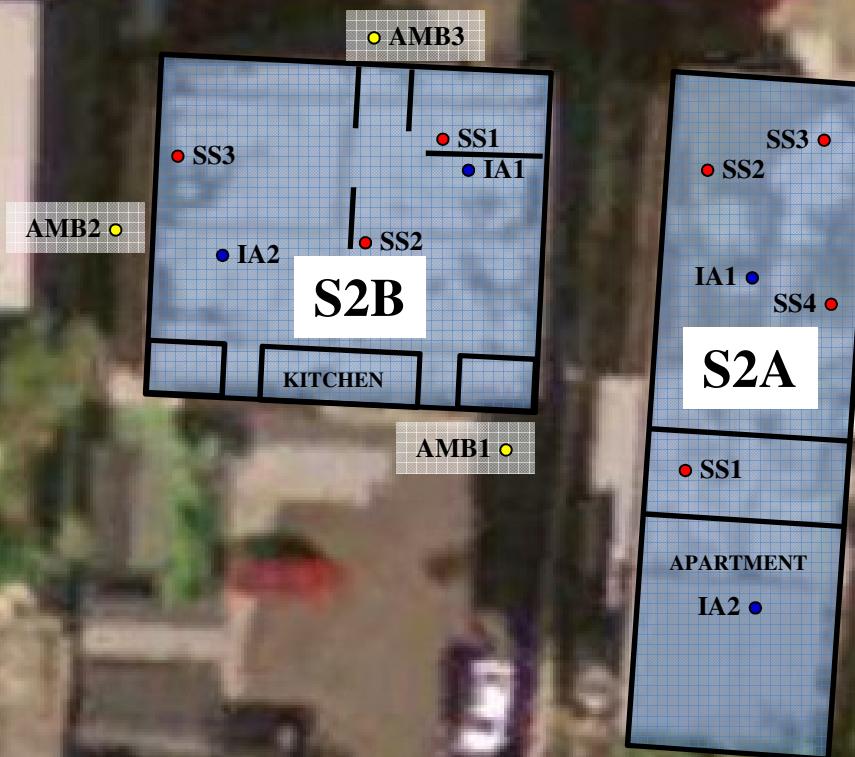
- Sub-slab soil gas sample
- Indoor air sample
- Ambient air sample



U.S. EPA Environmental Response Team
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Contract No. EP-W-09-031
Work Assignment No. SERAS-130

FIGURE 1
EQP SAMPLING LOCATIONS - FEBRUARY 2012
CABO ROJO SITE
CABO ROJO, PR

PR-103



LEGEND

- Sub-slab soil gas sample
- Indoor air sample
- Ambient air sample



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FIGURE 2
S2A/B SAMPLING LOCATIONS - FEBRUARY 2012
CABO ROJO SITE
CABO ROJO, PR



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FIGURE 3
CRPDC SAMPLING LOCATIONS - FEBRUARY 2012
CABO ROJO SITE
CABO ROJO, PR


LEGEND

- Sub-slab soil gas sample
- Indoor air sample
- Ambient air sample



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FIGURE 4
DEC SAMPLING LOCATIONS - FEBRUARY 2012
CABO ROJO SITE
CABO ROJO, PR



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FIGURE 5
SAMPLING LOCATIONS - MARCH 2012
CABO ROJO SITE
CABO ROJO, PR



Map created using 2006 high resolution orthoimagery data from USGS, road data, site survey GPS data. GPS data collected in Lat., Lon., decimal degree. WGS 84

Map Creation Date: 17 April 2013

Coordinate system: GCS_WGS_1984
Datum: D_WGS_1984

Data: g:\airteam\SERAS\arcviewprojects\00-130
MXD file: g:\airteam\SERAS\ArcInfoProjects\SER00130_Cabo_Rojo\PCE_Sampling_Result_ugm3_fgdb.mxd

Note: Unit 2 (DEC Building) does not appear on the figure, as it is not in the area of concern sampled during both mobilizations.

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FIGURE 6
TETRACHLOROETHENE RESULTS - FEBRUARY AND MARCH 2012
CABO ROJO SITE
CABO ROJO, PR



FIGURE 7
TRICHLOROETHENE RESULTS - FEBRUARY AND MARCH 2012
CABO ROJO SITE
CABO ROJO, PR

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Scientific Engineering Response and Analytical Services
Contract No. EP-W-09-031
Work Assignment No. SERAS-130

TABLES
Cabo Rojo Site
Cabo Rojo, PR
May 2012

Table 1
Sub-slab SUMMA® Canister Results
 March and February 2012
 Cabo Rojo Site
 Cabo Rojo, Puerto Rico
 May 2012

Analyte	N	Number of Non-detects	Number of Hits	parts per billion by volume (ppbv)				micrograms per cubic meter (ug/m ³)			
				Minimum	Maximum	Mean	Median	Minimum	Maximum	Mean	Median
1,1,1-Trichloroethane	10	8	2	0.117	0.197	0.157	0.157	0.638	1.07	0.854	0.854
1,1,2,2-Tetrachloroethane	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75	75	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	75	73	2	0.0842	0.156	0.120	0.120	0.334	0.618	0.476	0.476
1,2,4-Trimethylbenzene	29	12	17	0.089	26.5	2.50	0.362	0.437	130	12.3	1.78
1,2-Dibromoethane	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	75	73	2	0.257	0.278	0.268	0.268	1.04	1.13	1.085	1.085
1,2-Dichloropropane	10	9	1	0.229	0.229	0.229	0.229	1.06	1.06	1.06	1.06
1,3,5-Trimethylbenzene	10	8	2	1.79	9.7	5.75	5.75	8.79	47.7	28.2	28.2
1,3-Butadiene	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	10	8	2	0.0811	0.257	0.169	0.169	0.488	1.55	1.02	1.02
1,4-Dioxane	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	10	0	10	0.707	15.6	3.57	1.42	2.09	46	10.5	4.18
2-Hexanone	10	7	3	0.08	0.133	0.0978	0.0804	0.328	0.546	0.401	0.329
Acetone	10	2	8	4.65	6080	823	8.45	11.1	14400	1950	20.1
Benzene	29	18	11	0.093	4.69	1.20	0.943	0.297	15	3.84	3.01
Bromoform	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	10	9	1	0.147	0.147	0.147	0.147	0.924	0.924	0.924	0.924
Chlorobenzene	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	29	11	18	0.0916	4.81	1.04	0.249	0.447	23.5	5.09	1.21
Chloromethane	10	2	8	0.114	0.673	0.279	0.140	0.235	1.39	0.576	0.290
cis-1,2-Dichloroethene	75	69	6	0.0757	94.5	16.6	0.328	0.3	375	66.0	1.30
cis-1,3-Dichloropropene	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	10	8	2	0.324	1.91	1.12	1.12	1.12	6.58	3.85	3.85
Dibromochloromethane	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	10	0	10	0.221	0.498	0.375	0.364	1.09	2.46	1.85	1.80
Dichlorotetrafluoroethane	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Nondetects were not included in the computation of the summary statistics (minimum, maximum, mean, median).

N = number of samples

Hits = analytical result was greater than the reporting limit

NA = not applicable

Table 1 (continued)
Sub-slab SUMMA® Canister Results
 March and February 2012
 Cabo Rojo Site
 Cabo Rojo, Puerto Rico
 May 2012

Analyte	N	Number of Non-detects	Number of Hits	parts per billion by volume (ppbv)				micrograms per cubic meter (ug/m ³)			
				Minimum	Maximum	Mean	Median	Minimum	Maximum	Mean	Median
Ethyl Acetate	10	1	9	0.353	5.19	1.02	0.524	1.27	18.7	3.68	1.89
Ethylbenzene	29	16	13	0.106	12.5	1.44	0.447	0.461	54.2	6.26	1.94
Heptane	10	9	2	0.0845	4.31	2.20	2.20	17.7	17.7	17.7	17.7
Hexane	10	0	10	0.0919	11.9	2.33	0.357	0.324	41.8	8.19	1.26
Isopropyl Alcohol	10	2	8	0.371	17.8	3.88	0.954	0.911	43.6	9.52	2.34
m&p-Xylene	10	3	7	0.102	30.6	5.03	0.206	0.443	133	21.9	0.896
Methyl Isobutyl Ketone	10	1	9	0.0817	5.27	1.03	0.509	0.335	21.6	4.21	2.08
Methylene Chloride	29	15	14	0.0757	29.6	2.71	0.168	0.263	103	9.44	0.584
MTBE	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	10	4	6	0.0867	6.89	1.63	0.209	0.376	29.9	7.09	0.906
p-Ethyltoluene	10	8	2	2.44	12.6	7.52	7.52	12	61.8	36.9	36.9
Propylene	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	10	7	3	0.0912	0.589	0.268	0.123	0.389	2.51	1.14	0.526
Tetrachloroethene	75	11	64	0.0722	111000	4220	0.779	0.49	756000	28700	5.28
Tetrahydrofuran	10	1	9	0.113	16.8	2.27	0.252	0.333	49.6	6.69	0.743
Toluene	29	11	18	0.478	34700	1940	2.425	1.8	131000	7340	9.13
trans-1,2-Dichloroethene	75	71	4	0.0732	3.41	1.03	0.311	0.29	13.5	4.06	1.23
trans-1,3-Dichloropropene	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	75	53	22	0.0843	627	32.6	0.371	0.453	3370	175	1.99
Trichlorofluoromethane	10	0	10	0.204	1.83	0.572	0.296	1.14	10.3	3.21	1.66
Trichlorotrifluoroethane	10	2	8	0.0706	0.0791	0.0751	0.0753	0.541	0.606	0.575	0.577
Vinyl Acetate	10	10	0	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	75	74	1	0.0728	0.0728	0.0728	0.0728	0.186	0.186	0.186	0.186

Notes:

Nondetects were not included in the computation of the summary statistics (minimum, maximum, mean, median).

N = number of samples

Hits = analytical result was greater than the reporting limit

NA = not applicable

Table 2
Indoor Air SUMMA® Canister Results
 March and February 2012
 Cabo Rojo Site
 Cabo Rojo, Puerto Rico
 May 2012

Analyte	N	Number of Non-detects	Number of Hits	parts per billion by volume (ppbv)				micrograms per cubic meter (ug/m ³)			
				Minimum	Maximum	Mean	Median	Minimum	Maximum	Mean	Median
1,1,1-Trichloroethane	11	10	1	0.0790	0.0790	0.0790	0.0790	0.431	0.431	0.431	0.431
1,1,2,2-Tetrachloroethane	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	80	80	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	80	79	1	0.0399	0.0399	0.0399	0.0399	0.158	0.158	0.158	0.158
1,2,4-Trimethylbenzene	33	13	20	0.230	91.6	12.8	0.654	1.13	450	62.9	3.21
1,2-Dibromoethane	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	80	64	16	0.0346	0.933	0.164	0.0710	0.14	3.78	0.664	0.286
1,2-Dichloropropane	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	11	0	11	0.105	31.3	7.94	0.251	0.516	154	39.1	1.23
1,3-Butadiene	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	11	3	8	0.07	0.231	0.105	0.0772	0.421	1.39	0.631	0.465
1,4-Dioxane	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	11	0	11	0.628	8.22	2.02	1.15	1.85	24.2	5.95	3.41
2-Hexanone	11	10	1	0.0842	0.0842	0.0842	0.0842	0.345	0.345	0.345	0.345
Acetone	11	0	11	26.7	9790	2600	48.6	63.5	23300	6180	115
Benzene	33	20	13	0.231	2.08	0.646	0.384	0.738	6.65	2.06	1.23
Bromoform	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	11	4	7	0.0698	0.0825	0.0754	0.0748	0.439	0.519	0.475	0.471
Chlorobenzene	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	33	12	21	0.0311	3.25	0.703	0.388	0.152	15.9	3.44	1.90
Chloromethane	11	0	11	0.446	0.862	0.694	0.727	0.921	1.78	1.43	1.50
cis-1,2-Dichloroethene	80	76	4	0.0447	0.261	0.134	0.114	0.177	1.03	0.529	0.454
cis-1,3-Dichloropropene	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	11	7	4	0.23	1.36	0.689	0.584	0.793	4.68	2.37	2.01
Dibromochloromethane	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	11	0	11	0.198	0.4	0.329	0.356	0.979	1.98	1.63	1.76
Dichlorotetrafluoroethane	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Nondetects were not included in the computation of the summary statistics (minimum, maximum, mean, median).

N = number of samples

Hits = analytical result was greater than the reporting limit

NA = not applicable

Table 2 (continued)
Indoor Air SUMMA® Canister Results
 March and February 2012
 Cabo Rojo Site
 Cabo Rojo, Puerto Rico
 May 2012

Analyte	N	Number of Non-detects	Number of Hits	parts per billion by volume (ppbv)				micrograms per cubic meter (ug/m ³)			
				Minimum	Maximum	Mean	Median	Minimum	Maximum	Mean	Median
Ethyl Acetate	11	1	10	0.0773	40.2	5.21	1.18	0.279	145	18.8	4.27
Ethylbenzene	33	10	23	0.16	4.22	0.614	0.296	0.693	18.3	2.67	1.28
Heptane	11	1	10	0.106	1.28	0.364	0.257	0.434	5.24	1.49	1.06
Hexane	11	0	11	0.371	10.2	3.38	0.674	1.31	35.8	11.9	2.38
Isopropyl Alcohol	11	8	3	1.55	14.9	6.3	2.45	3.8	36.5	15.4	6.03
m&p-Xylene	11	0	11	0.661	15.8	2.99	0.991	2.87	68.7	13.0	4.3
Methyl Isobutyl Ketone	11	0	11	0.103	2.27	0.722	0.308	0.423	9.31	2.96	1.26
Methylene Chloride	33	1	32	0.0983	173	7.69	0.150	0.342	600	26.7	0.519
MTBE	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	11	0	11	0.262	4.98	1.752	0.41	1.14	21.6	7.61	1.78
p-Ethyltoluene	11	0	11	0.114	40.6	10.2	0.297	0.561	200	50.2	1.46
Propylene	11	11	0	NA	NA	NA	NA	0.307	1.97	0.591	0.439
Styrene	11	0	11	0.072	0.463	0.139	0.103	NA	NA	NA	NA
Tetrachloroethene	80	62	18	0.0302	7.01	0.782	0.143	0.204	47.5	5.31	0.970
Tetrahydrofuran	11	3	8	0.117	2.03	0.740	0.313	0.347	6	2.18	0.924
Toluene	33	16	17	1.93	216	23.3	4.66	7.27	814	87.9	17.6
trans-1,2-Dichloroethene	80	79	1	0.292	0.292	0.292	0.292	1.16	1.16	1.16	1.16
trans-1,3-Dichloropropene	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	80	77	3	0.045	0.136	0.096	0.107	0.242	0.730	0.516	0.575
Trichlorofluoromethane	11	0	11	0.198	0.26	0.216	0.212	1.11	1.46	1.22	1.19
Trichlorotrifluoroethane	11	2	9	0.0728	0.0859	0.0805	0.0802	0.558	0.658	0.617	0.614
Vinyl Acetate	11	11	0	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	80	80	0	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Nondetects were not included in the computation of the summary statistics (minimum, maximum, mean, median).

N = number of samples

Hits = analytical result was greater than the reporting limit

NA = not applicable

Table 3
Ambient Air SUMMA® Canister Results
 March and February 2012
 Cabo Rojo Site
 Cabo Rojo, Puerto Rico
 May 2012

Analyte	N	Number of Non-detects	Number of Hits	parts per billion by volume (ppbv)				micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)			
				Minimum	Maximum	Mean	Median	Minimum	Maximum	Mean	Median
1,1,1-Trichloroethane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	18	18	0	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	18	18	0	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	9	2	7	0.181	4.56	1.01	0.254	0.888	22.4	4.94	1.25
1,2-Dibromoethane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	18	18	0	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	5	2	3	0.0777	1.78	0.783	0.492	0.382	8.77	3.86	2.42
1,3-Butadiene	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	5	0	5	0.686	1.57	1.12	1.14	2.02	4.63	3.29	3.37
2-Hexanone	5	4	1	0.132	0.132	0.132	0.132	0.541	0.541	0.541	0.541
Acetone	5	0	5	5.26	446	126	8.01	12.5	1060	299	19.0
Benzene	9	4	5	0.247	0.345	0.289	0.265	0.788	1.1	0.922	0.846
Bromoform	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	4	1	0.073	0.073	0.073	0.073	0.459	0.459	0.459	0.459
Chlorobenzene	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	9	6	3	0.123	0.492	0.320	0.346	0.602	2.4	1.56	1.69
Chloromethane	5	0	5	0.706	0.902	0.810	0.798	1.46	1.86	1.67	1.65
cis-1,2-Dichloroethene	18	18	0	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	5	4	1	0.0899	0.0899	0.0899	0.0899	0.309	0.309	0.309	0.309
Dibromochloromethane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	5	0	5	0.307	0.419	0.362	0.368	1.52	2.07	1.79	1.82
Dichlorotetrafluoroethane	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Nondetects were not included in the computation of the summary statistics (minimum, maximum, mean, median).

N = number of samples

Hits = analytical result was greater than the reporting limit

NA = not applicable

Table 3 (continued)
Ambient Air SUMMA® Canister Results
 March and February 2012
 Cabo Rojo Site
 Cabo Rojo, Puerto Rico
 May 2012

Analyte	N	Number of Non-detects	Number of Hits	parts per billion by volume (ppbv)				micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)			
				Minimum	Maximum	Mean	Median	Minimum	Maximum	Mean	Median
Ethyl Acetate	5	0	5	0.597	1.28	0.893	0.876	2.15	4.62	3.22	3.16
Ethylbenzene	9	1	8	0.163	0.337	0.219	0.198	0.708	1.46	0.948	0.857
Heptane	5	0	5	0.129	0.213	0.152	0.143	0.53	0.872	0.623	0.587
Hexane	5	0	5	0.439	1.84	0.832	0.517	1.55	6.49	2.93	1.82
Isopropyl Alcohol	5	2	3	1.62	3.43	2.54	2.57	3.99	8.42	6.24	6.3
m&p-Xylene	5	0	5	0.552	1.45	0.794	0.693	2.4	6.3	3.45	3.01
Methyl Isobutyl Ketone	5	3	2	0.394	0.401	0.398	0.398	1.61	1.64	1.63	1.63
Methylene Chloride	9	0	9	0.0802	0.714	0.206	0.145	0.279	2.48	0.715	0.505
MTBE	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	5	0	5	0.203	0.771	0.356	0.254	0.881	3.35	1.5442	1.1
p-Ethyltoluene	5	2	3	0.0736	2.14	0.951	0.640	0.362	10.5	4.67	3.15
Propylene	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	5	3	2	0.0718	0.0745	0.0732	0.0732	0.306	0.317	0.312	0.312
Tetrachloroethene	18	14	4	0.0679	1.18	0.358	0.0926	0.46	7.99	2.43	0.6265
Tetrahydrofuran	5	0	5	0.25	0.467	0.332	0.284	0.736	1.38	0.9792	0.837
Toluene	9	3	6	1.58	4.46	2.61	2.15	5.97	16.8	9.82	8.09
trans-1,2-Dichloroethene	18	18	0	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	18	17	1	0.0667	0.0667	0.0667	0.0667	0.359	0.359	0.359	0.359
Trichlorofluoromethane	5	0	5	0.195	0.231	0.211	0.212	1.10	1.30	1.19	1.19
Trichlorotrifluoroethane	5	1	4	0.0733	0.0846	0.0772	0.0755	0.562	0.648	0.592	0.578
Vinyl Acetate	5	5	0	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	18	18	0	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Nondetects were not included in the computation of the summary statistics (minimum, maximum, mean, median).

N = number of samples

Hits = analytical result was greater than the reporting limit

NA = not applicable

APPENDIX A
SUMMA[®] Canister Analytical Reports
Cabo Rojo Site
Cabo Rojo, PR
May 2012

ANALYTICAL REPORT

Prepared by

Lockheed Martin Information Systems and Global Services/Environmental Services
Scientific, Engineering, Response and Analytical Services

Cabo Rojo Site
Puerto Rico

March 2012

EPA Work Assignment No. SERAS-130
LOCKHEED MARTIN Work Order SER0130
EPA Contract No. EP-W-09-031

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REPORT OF LABORATORY ANALYSIS

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Appendices will be furnished on request.



TESTING LABORATORIES INFORMATION

Analysis of Volatile Organic Compounds in Air (SERAS SOP# 1814, EPA Method TO-15)

ERT/SERAS Laboratory
2890 Woodbridge Avenue
Edison, NJ 08837

All analyses were performed according to our NELAP-approved quality assurance program. The test results meet the requirements of the current NELAP standards, where applicable, except as noted in the laboratory case narrative provided. Results are intended to be considered in their entirety and apply only to those analyzed and reported herein.

ERT/SERAS Laboratory is certified by the New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID # 12023 for TO-15 analysis in air.

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Detailed Sample Information

<u>SERAS SAMPLE #</u>	<u>Field Sample #</u>
R203001-01	0-130-1009
R203001-02	0-130-1010
R203001-03	0-130-1011
R203001-04	0-130-1030
R203001-05	0-130-1031
R203001-06	0-130-1032
R203001-07	0-130-1056
R203001-08	0-130-1027
R203001-09	0-130-1028
R203001-10	0-130-1029
R203001-11	0-130-1034
R203001-12	0-130-1035
R203001-13	0-130-1036
R203001-14	0-130-1038
R203001-15	0-130-1040
R203001-16	0-130-1014
R203001-17	0-130-1015
R203001-18	0-130-1016
R203001-19	0-130-1017
R203001-20	0-130-1023
R203001-21	0-130-1024
R203001-22	0-130-1025
R203001-23	0-130-1026

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Introduction

SERAS personnel, in response to WA# SERAS-130, provided analytical support for environmental samples collected from the Cabo Rojo Site in Puerto Rico, as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and QA/QC results.

The samples were treated with procedures consistent with those specified in SERAS SOP #1008, *Operation of Sample Refrigeration Units and Sample Receiving, Handling and Storage*.

Chain of Custody #	Number of Samples	Sampling Date	Date Received	Date Analyzed	Matrix	Analysis/Method	Laboratory	Data Package
0-130-3/1/12-0006	8	03/01/12	03/02/12	03/03-03/05/12	Air	TO-15(VOC) SERAS SOP 1814	ERT/SERAS	X 031
0-130-3/1/12-0007	8							
0-130-3/1/12-0008	6							
	1				Trip Blank			

Case Narrative

Sampling was conducted as per the site-specific Quality Assurance Project Plan (QAPP) and analyzed by the analytical methods stated in the QAPP. The laboratory reported the data to three significant figures. Any other representation of the data is the responsibility of the user. All data validation flags have been inserted into the results tables.

TO-15 (VOC) in Air Package X 031

Acetone and isopropyl alcohol were detected above the reporting limit (RL) in the canister of samples: 0-130-1029 and -1040 during the SUMMA certification process. The isopropyl alcohol result for sample 0-130-1029 is qualified estimated (J) as the results may be biased high.

The method blanks of 3/3/12 and 3/4/12 contained acetone above the RL. The acetone result for sample 0-130-1056 is qualified non-detect (U) and its RL has been raised to the level of acetone in the sample.

Isopropyl alcohol did not meet the % RSD criterion for the initial calibration of 9/22/11. Isopropyl alcohol is qualified estimated (J) for samples: 0-130-1026, 0-130-1028, 0-130-1035, 0-130-1038 and 0-130-1040.

The low point(s) of the initial calibration were dropped for acetone and isopropyl alcohol. The RL is based on the 100 ppt standard for acetone and 500 ppt standard for isopropyl alcohol for samples: 0-130-1014 through 0-130-1017, 0-130-1023 through 0-130-1029, 0-130-1034 through 0-130-1036, 0-130-1038, 0-130-1040 and 0-130-1056.

Vinyl acetate was below the % recovery criterion for the LCS of 3/4/12. The vinyl acetate result is estimated (UJ) for samples: 0-130-1014 through 0-130-1017, 0-130-1023 through 0-130-1029, 0-130-1034 through 0-130-1036, 0-130-1038, 0-130-1040 and 0-130-1056.

The results presented in this report only relate to the samples analyzed. All results are intended to be considered in their entirety. The Environmental Response Team/Scientific, Engineering, Response and Analytical Services laboratory is not responsible for utilization of less than the complete report.

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Summary of Abbreviations

BFB	Bromofluorobenzene
C	Centigrade
CLP	Contract Laboratory Program
COC	Chain of Custody
conc	concentration
cont	continued
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
D	(Surrogate Table) value is from a diluted sample and was not calculated
Dioxin	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/MS	Gas Chromatography/ Mass Spectrometry
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MS (BS)	Matrix Spike (Blank Spike)
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
NS	Not Spiked
% D	Percent Difference
% REC	Percent Recovery
SOP	Standard Operating Procedure
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
PQL	Practical Quantitation Limit
PAL	Performance Acceptance Limit
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
SERAS	Scientific, Engineering, Response and Analytical Services
SIM	Selected Ion Monitoring
Sur	Surrogate
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m ³	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	s	sigma

Data Validation Flags

J	Value is estimated	R	Value is unusable
J+	Value is estimated high (metals only)	U	Not detected
J-	Value is estimated low (metals only)	UJ	Not detected and RL is estimated
N	Presumptively present (Aroclors only)		

Rev. 1/14/09



Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Page 1 of 5

Method SERAS SOP#1814

SERAS Sample No.		R203001-01		R203001-02		R203001-03		R203001-04
Sample Number	3/3/2012	0-130-1009		0-130-1010		0-130-1011		0-130-1030
Sample Location	Method Blank	S2B-IA2		S2B-IA1		S2B-IA1		S2B-AMB1
Analyte	Results ppbv	RL ppbv						
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-05	R203001-06
Sample Number	0-130-1031	0-130-1032
Sample Location	S2B-AMB2	S2B-AMB3
Analyte	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698
1,1-Dichloroethene	U	0.0698
trans-1,2-Dichloroethene	U	0.0698
1,1-Dichloroethane	U	0.0698
cis-1,2-Dichloroethene	U	0.0698
1,2-Dichloroethane	U	0.0698
Trichloroethene	U	0.0698
Tetrachloroethene	U	0.0698

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

Analyte	3/3/2012		R203001-07		R203001-16		R203001-17		R203001-18					
	Sample No.	Sample Number	Method Blank	0-130-1056	TRIP BLANK	0-130-1014	EQP-IA1	0-130-1015	EQP-IA1	0-130-1016	EQP-IA3			
Propylene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Dichlorodifluoromethane		U	0.0698		U	0.0698	0.365	0.0698	0.360	0.0698	0.198	0.0698		
Chloromethane		U	0.0698		U	0.0698	0.736	0.0698	0.722	0.0698	0.446	0.0698		
Dichlortetrafluoroethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Vinyl Chloride		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
1,3-Butadiene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Bromomethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Chloroethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Acetone	0.275	0.233		U	0.599	48.5	0.233		46.7	0.233	41.2	0.233		
Trichlorofluoromethane		U	0.0698		U	0.0698	0.221	0.0698	0.207	0.0698	0.198	0.0698		
Isopropyl Alcohol		U	1.16		U	1.16		U	1.16		U	1.16		
1,1-Dichloroethene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Methylene Chloride		U	0.0698		U	0.0698	0.239	0.0698	0.227	0.0698	0.226	0.0698		
Trichlorotrifluoroethane		U	0.0698		U	0.0698	0.0790	0.0698	0.0728	0.0698	U	0.0698		
trans-1,2-Dichloroethene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
1,1-Dichloroethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
MTBE		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Vinyl Acetate		U	0.0698		U	J	0.0698		U	J	0.0698	U	J	0.0698
2-Butanone		U	0.0698		U	0.0698	1.15	0.0698	1.23	0.0698	0.808	0.0698		
cis-1,2-Dichloroethene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Ethyl Acetate		U	0.0698		U	0.0698	1.30	0.0698	1.35	0.0698	1.16	0.0698		
Hexane		U	0.0698		U	0.0698	0.654	0.0698	0.642	0.0698	0.629	0.0698		
Chloroform		U	0.0698		U	0.0698	1.24	0.0698	1.22	0.0698	1.20	0.0698		
Tetrahydrofuran		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
1,2-Dichloroethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
1,1,1-Trichloroethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Benzene		U	0.0698		U	0.0698	0.307	0.0698	0.294	0.0698	0.299	0.0698		
Carbon Tetrachloride		U	0.0698		U	0.0698	0.0765	0.0698	0.0729	0.0698	U	0.0698		
Cyclohexane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
1,2-Dichloropropane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
1,4-Dioxane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Trichloroethene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Heptane		U	0.0698		U	0.0698	0.219	0.0698	0.168	0.0698	0.239	0.0698		
cis-1,3-Dichloropropene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Methyl Isobutyl Ketone		U	0.0698		U	0.0698	0.264	0.0698	0.433	0.0698	0.236	0.0698		
trans-1,3-Dichloropropene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
1,1,2-Trichloroethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Toluene		U	0.0698		U	0.0698	3.36	0.0698	3.31	0.0698	3.17	0.0698		
2-Hexanone		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Dibromochloromethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
1,2-Dibromoethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Tetrachloroethene		U	0.0698		U	0.0698	0.0891	0.0698	0.110	0.0698	0.0939	0.0698		
Chlorobenzene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Ethylbenzene		U	0.0698		U	0.0698	0.305	0.0698	0.296	0.0698	0.283	0.0698		
m&p-Xylene		U	0.0698		U	0.0698	0.991	0.0698	0.939	0.0698	0.920	0.0698		
Bromoform		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
Styrene		U	0.0698		U	0.0698	0.105	0.0698	0.104	0.0698	0.0995	0.0698		
1,1,2,2-Tetrachloroethane		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
o-Xylene		U	0.0698		U	0.0698	0.410	0.0698	0.386	0.0698	0.380	0.0698		
p-Ethyltoluene		U	0.0698		U	0.0698	0.297	0.0698	0.294	0.0698	0.281	0.0698		
1,3,5-Trimethylbenzene		U	0.0698		U	0.0698	0.251	0.0698	0.238	0.0698	0.239	0.0698		
1,2,4-Trimethylbenzene		U	0.0698		U	0.0698	0.702	0.0698	0.647	0.0698	0.650	0.0698		
1,3-Dichlorobenzene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		
1,4-Dichlorobenzene		U	0.0698		U	0.0698	0.0773	0.0698	0.0700	0.0698	0.0757	0.0698		
1,2-Dichlorobenzene		U	0.0698		U	0.0698		U	0.0698		U	0.0698		

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	R203001-19		R203001-20		R203001-21		R203001-22		R203001-23	
Sample Number	0-130-1017		0-130-1023		0-130-1024		0-130-1025		0-130-1026	
Sample Location	EQP-IA2		EQP-IA5		EQP-IA4		EQP-AMB1		EQP-AMB2	
Analyte	Results ppbv	RL ppbv								
Propylene	U	0.0698								
Dichlorodifluoromethane	0.317	0.0698	0.317	0.0698	0.353	0.0698	0.348	0.0698	0.368	0.0698
Chloromethane	0.663	0.0698	0.699	0.0698	0.735	0.0698	0.706	0.0698	0.796	0.0698
Dichlortetrafluoroethane	U	0.0698								
Vinyl Chloride	U	0.0698								
1,3-Butadiene	U	0.0698								
Bromomethane	U	0.0698								
Chloroethane	U	0.0698								
Acetone	44.9	0.233	26.7	0.233	48.6	0.233	5.26	0.233	6.29	0.233
Trichlorofluoromethane	0.202	0.0698	0.220	0.0698	0.206	0.0698	0.195	0.0698	0.212	0.0698
Isopropyl Alcohol	U	1.16	U	1.16	U	1.16	U	1.16	3.43	J 1.16
1,1-Dichloroethene	U	0.0698								
Methylene Chloride	0.223	0.0698	0.0983	0.0698	0.124	0.0698	0.0988	0.0698	0.0802	0.0698
Trichlorotrifluoroethane	U	0.0698	0.0802	0.0698	0.0831	0.0698	U	0.0698	0.0846	0.0698
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
MTBE	U	0.0698								
Vinyl Acetate	U	J 0.0698								
2-Butanone	0.652	0.0698	0.628	0.0698	0.718	0.0698	0.686	0.0698	0.923	0.0698
cis-1,2-Dichloroethene	U	0.0698								
Ethyl Acetate	1.09	0.0698	0.278	0.0698	0.453	0.0698	0.597	0.0698	0.712	0.0698
Hexane	0.674	0.0698	0.371	0.0698	0.496	0.0698	0.495	0.0698	0.439	0.0698
Chloroform	1.19	0.0698	1.51	0.0698	3.25	0.0698	U	0.0698	0.123	0.0698
Tetrahydrofuran	0.302	0.0698	0.324	0.0698	0.117	0.0698	0.467	0.0698	0.386	0.0698
1,2-Dichloroethane	U	0.0698								
1,1,1-Trichloroethane	U	0.0698								
Benzene	0.286	0.0698	0.231	0.0698	0.287	0.0698	0.265	0.0698	0.247	0.0698
Carbon Tetrachloride	0.0748	0.0698	0.0800	0.0698	0.0825	0.0698	U	0.0698	U	0.0698
Cyclohexane	U	0.0698								
1,2-Dichloropropane	U	0.0698								
1,4-Dioxane	U	0.0698								
Trichloroethene	U	0.0698								
Heptane	0.176	0.0698	0.106	0.0698	U	0.0698	0.129	0.0698	0.129	0.0698
cis-1,3-Dichloropropene	U	0.0698								
Methyl Isobutyl Ketone	0.229	0.0698	0.349	0.0698	0.308	0.0698	U	0.0698	U	0.0698
trans-1,3-Dichloropropene	U	0.0698								
1,1,2-Trichloroethane	U	0.0698								
Toluene	3.26	0.0698	2.74	0.0698	1.93	0.0698	1.69	0.0698	1.58	0.0698
2-Hexanone	U	0.0698								
Dibromochloromethane	U	0.0698								
1,2-Dibromoethane	U	0.0698								
Tetrachloroethene	0.0869	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Chlorobenzene	U	0.0698								
Ethylbenzene	0.302	0.0698	0.186	0.0698	0.237	0.0698	0.163	0.0698	0.195	0.0698
m&p-Xylene	0.974	0.0698	0.661	0.0698	0.777	0.0698	0.552	0.0698	0.581	0.0698
Bromoform	U	0.0698								
Styrene	0.0944	0.0698	0.0720	0.0698	0.127	0.0698	U	0.0698	U	0.0698
1,1,2-Tetrachloroethane	U	0.0698								
o-Xylene	0.395	0.0698	0.262	0.0698	0.319	0.0698	0.203	0.0698	0.235	0.0698
p-Ethyltoluene	0.278	0.0698	0.114	0.0698	0.232	0.0698	U	0.0698	U	0.0698
1,3,5-Trimethylbenzene	0.233	0.0698	0.105	0.0698	0.186	0.0698	U	0.0698	U	0.0698
1,2,4-Trimethylbenzene	0.658	0.0698	0.300	0.0698	0.502	0.0698	0.195	0.0698	0.181	0.0698
1,3-Dichlorobenzene	U	0.0698								
1,4-Dichlorobenzene	0.0771	0.0698	U	0.0698	0.127	0.0698	U	0.0698	U	0.0698
1,2-Dichlorobenzene	U	0.0698								

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	R203001-09		R203001-10		R203001-08		R203001-11		R203001-12	
Sample Number	0-130-1028		0-130-1029		0-130-1027		0-130-1034		0-130-1035	
Sample Location	EQP-AMB4		EQP-AMB5		EQP-AMB3		EQP-IA6		EQP-IA7	
Analyte	Results ppbv	RL ppbv								
Propylene	U	0.0698								
Dichlorodifluoromethane	0.419	0.0698	0.307	0.0698	0.368	0.0698	0.400	0.0698	0.356	0.0698
Chloromethane	0.902	0.0698	0.847	0.0698	0.798	0.0698	0.862	0.0698	0.740	0.0698
Dichlortetrafluoroethane	U	0.0698								
Vinyl Chloride	U	0.0698								
1,3-Butadiene	U	0.0698								
Bromomethane	U	0.0698								
Chloroethane	U	0.0698								
Acetone	165	5.00	8.01	0.233	446	5.00	779	5.00	9790	40.0
Trichlorofluoromethane	0.231	0.0698	0.212	0.0698	0.205	0.0698	0.222	0.0698	0.260	0.0698
Isopropyl Alcohol	1.62	J 1.16	2.57	J 1.16	U	1.16	U	1.16	2.45	J 1.16
1,1-Dichloroethene	U	0.0698								
Methylene Chloride	0.234	0.0698	0.128	0.0698	0.714	0.0698	1.26	0.0698	33.2	0.0698
Trichlorotrifluoroethane	0.0755	0.0698	0.0755	0.0698	0.0733	0.0698	0.0859	0.0698	0.0840	0.0698
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
MTBE	U	0.0698								
Vinyl Acetate	U	J 0.0698								
2-Butanone	1.14	0.0698	1.57	0.0698	1.26	0.0698	0.738	0.0698	1.79	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	0.151	0.0698	U	0.0698
Ethyl Acetate	0.876	0.0698	1.00	0.0698	1.28	0.0698	1.20	0.0698	U	0.0698
Hexane	0.868	0.0698	0.517	0.0698	1.84	0.0698	3.22	0.0698	9.86	0.0698
Chloroform	0.492	0.0698	U	0.0698	0.346	0.0698	0.385	0.0698	0.358	0.0698
Tetrahydrofuran	0.272	0.0698	0.284	0.0698	0.250	0.0698	0.290	0.0698	2.03	0.0698
1,2-Dichloroethane	U	0.0698								
1,1,1-Trichloroethane	U	0.0698								
Benzene	0.249	0.0698	0.338	0.0698	0.345	0.0698	0.384	0.0698	0.524	0.0698
Carbon Tetrachloride	0.0730	0.0698	U	0.0698	U	0.0698	0.0713	0.0698	U	0.0698
Cyclohexane	U	0.0698	U	0.0698	0.0899	0.0698	U	0.0698	0.570	0.0698
1,2-Dichloropropane	U	0.0698								
1,4-Dioxane	U	0.0698								
Trichloroethene	U	0.0698								
Heptane	0.146	0.0698	0.143	0.0698	0.213	0.0698	0.275	0.0698	0.332	0.0698
cis-1,3-Dichloropropene	U	0.0698								
Methyl Isobutyl Ketone	0.394	0.0698	U	0.0698	0.401	0.0698	0.147	0.0698	2.27	0.0698
trans-1,3-Dichloropropene	U	0.0698								
1,1,2-Trichloroethane	U	0.0698								
Toluene	1.99	0.0698	3.61	0.0698	4.46	0.0698	4.66	0.0698	40.8	0.0698
2-Hexanone	U	0.0698	U	0.0698	0.132	0.0698	U	0.0698	U	0.0698
Dibromochloromethane	U	0.0698								
1,2-Dibromoethane	U	0.0698								
Tetrachloroethene	U	0.0698	U	0.0698	0.103	0.0698	0.236	0.0698	1.81	0.0698
Chlorobenzene	U	0.0698								
Ethylbenzene	0.184	0.0698	0.204	0.0698	0.337	0.0698	0.451	0.0698	0.715	0.0698
m&p-Xylene	0.693	0.0698	0.695	0.0698	1.45	0.0698	1.98	0.0698	3.22	0.0698
Bromoform	U	0.0698								
Styrene	U	0.0698	0.0718	0.0698	0.0745	0.0698	0.0879	0.0698	0.0990	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698								
o-Xylene	0.316	0.0698	0.254	0.0698	0.771	0.0698	1.24	0.0698	3.98	0.0698
p-Ethyltoluene	0.640	0.0698	0.0736	0.0698	2.14	0.0698	4.71	0.0698	38.9	0.0698
1,3,5-Trimethylbenzene	0.492	0.0698	0.0777	0.0698	1.78	0.0698	3.64	0.0698	30.9	0.0698
1,2,4-Trimethylbenzene	1.27	0.0698	0.254	0.0698	4.56	0.0698	9.16	0.0698	91.6	1.50
1,3-Dichlorobenzene	U	0.0698								
1,4-Dichlorobenzene	U	0.0698								
1,2-Dichlorobenzene	U	0.0698								

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	R203001-13		R203001-14		R203001-15	
Sample Number	0-130-1036		0-130-1038		0-130-1040	
Sample Location	EQP-IA7		EQP-IA8		EQP-IA9	
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Propylene	U	0.0698	U	0.0698	U	0.0698
Dichlorodifluoromethane	0.233	0.0698	0.358	0.0698	0.360	0.0698
Chloromethane	0.507	0.0698	0.793	0.0698	0.727	0.0698
Dichlortetrafluoroethane	U	0.0698	U	0.0698	U	0.0698
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698
1,3-Butadiene	U	0.0698	U	0.0698	U	0.0698
Bromomethane	U	0.0698	U	0.0698	U	0.0698
Chloroethane	U	0.0698	U	0.0698	U	0.0698
Acetone	8830	40.0	8540	40.0	384	5.00
Trichlorofluoromethane	0.234	0.0698	0.198	0.0698	0.212	0.0698
Isopropyl Alcohol	U	1.16	1.55	J 1.16	14.9	J 1.16
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698
Methylene Chloride	34.0	0.0698	173	1.50	0.321	0.0698
Trichlorotrifluoroethane	0.0800	0.0698	0.0777	0.0698	0.0818	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698
MTBE	U	0.0698	U	0.0698	U	0.0698
Vinyl Acetate	U	J 0.0698	U	J 0.0698	U	J 0.0698
2-Butanone	1.36	0.0698	4.90	0.0698	8.22	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698
Ethyl Acetate	0.0773	0.0698	4.95	0.0698	40.2	0.0698
Hexane	10.2	0.0698	8.97	0.0698	1.45	0.0698
Chloroform	0.388	0.0698	0.167	0.0698	0.466	0.0698
Tetrahydrofuran	1.55	0.0698	1.05	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	0.256	0.0698
1,1,1-Trichloroethane	U	0.0698	0.0790	0.0698	U	0.0698
Benzene	0.530	0.0698	0.918	0.0698	0.680	0.0698
Carbon Tetrachloride	0.0698	0.0698	U	0.0698	U	0.0698
Cyclohexane	0.597	0.0698	1.36	0.0698	0.230	0.0698
1,2-Dichloropropane	U	0.0698	U	0.0698	U	0.0698
1,4-Dioxane	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698
Heptane	0.356	0.0698	0.484	0.0698	1.28	0.0698
cis-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698
Methyl Isobutyl Ketone	1.81	0.0698	1.79	0.0698	0.103	0.0698
trans-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698
1,1,2-Trichloroethane	U	0.0698	U	0.0698	U	0.0698
Toluene	40.4	0.0698	38.2	0.0698	216	1.50
2-Hexanone	U	0.0698	U	0.0698	0.0842	0.0698
Dibromochloromethane	U	0.0698	U	0.0698	U	0.0698
1,2-Dibromoethane	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	1.82	0.0698	7.01	0.0698	U	0.0698
Chlorobenzene	U	0.0698	U	0.0698	U	0.0698
Ethylbenzene	0.739	0.0698	0.859	0.0698	4.22	0.0698
m&p-Xylene	3.35	0.0698	3.32	0.0698	15.8	0.0698
Bromoform	U	0.0698	U	0.0698	U	0.0698
Styrene	0.103	0.0698	0.173	0.0698	0.463	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698	U	0.0698	U	0.0698
o-Xylene	4.11	0.0698	2.81	0.0698	4.98	0.0698
p-Ethyltoluene	40.6	0.0698	21.4	0.0698	5.18	0.0698
1,3,5-Trimethylbenzene	31.3	0.0698	15.9	0.0698	4.38	0.0698
1,2,4-Trimethylbenzene	87.3	1.50	37.9	0.0698	20.7	0.0698
1,3-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698
1,4-Dichlorobenzene	0.0763	0.0698	0.105	0.0698	0.231	0.0698
1,2-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	R203001-01	R203001-02	R203001-03	R203001-04
Sample Number	0-130-1009	0-130-1010	0-130-1011	0-130-1030
Sample Location	Method Blank	S2B-IA2	S2B-IA1	S2B-AMB1

| Analyte | Results
$\mu\text{g}/\text{m}^3$ | RL
$\mu\text{g}/\text{m}^3$ |
|--------------------------|-------------------------------------|--------------------------------|-------------------------------------|--------------------------------|-------------------------------------|--------------------------------|-------------------------------------|--------------------------------|-------------------------------------|--------------------------------|
| Vinyl Chloride | U | 0.178 |
| 1,1-Dichloroethene | U | 0.277 |
| trans-1,2-Dichloroethene | U | 0.277 |
| 1,1-Dichloroethane | U | 0.282 |
| cis-1,2-Dichloroethene | U | 0.277 |
| 1,2-Dichloroethane | U | 0.282 |
| Trichloroethene | U | 0.375 |
| Tetrachloroethene | U | 0.473 |

Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-05	R203001-06
Sample Number	0-130-1031	0-130-1032
Sample Location	S2B-AMB2	S2B-AMB3

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277
trans-1,2-Dichloroethene	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277
1,2-Dichloroethane	U	0.282	U	0.282
Trichloroethene	U	0.375	U	0.375
Tetrachloroethene	U	0.473	U	0.473

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	3/3/2012		R203001-07		R203001-16		R203001-17		R203001-18	
Sample Number	Method Blank		0-130-1056		0-130-1014		0-130-1015		0-130-1016	
Sample Location			TRIP BLANK		EQP-IA1		EQP-IA1		EQP-IA3	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Propylene	U	0.120								
Dichlorodifluoromethane	U	0.345	U	0.345	1.81	0.345	1.78	0.345	0.979	0.345
Chloromethane	U	0.144	U	0.144	1.52	0.144	1.49	0.144	0.921	0.144
Dichlorotetrafluoroethane	U	0.488								
Vinyl Chloride	U	0.178								
1,3-Butadiene	U	0.154								
Bromomethane	U	0.271								
Chloroethane	U	0.184								
Acetone	0.653	0.552	U	1.42	115	0.552	111	0.552	97.8	0.552
Trichlorofluoromethane	U	0.392	U	0.392	1.24	0.392	1.16	0.392	1.11	0.392
Isopropyl Alcohol	U	2.85								
1,1-Dichloroethene	U	0.277								
Methylene Chloride	U	0.242	U	0.242	0.831	0.242	0.790	0.242	0.785	0.242
Trichlorotrifluoroethane	U	0.535	U	0.535	0.605	0.535	0.558	0.535	U	0.535
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
MTBE	U	0.252								
Vinyl Acetate	U	0.246	U	J 0.246	U	J 0.246	U	J 0.246	U	J 0.246
2-Butanone	U	0.206	U	0.206	3.41	0.206	3.64	0.206	2.38	0.206
cis-1,2-Dichloroethene	U	0.277								
Ethyl Acetate	U	0.251	U	0.251	4.70	0.251	4.87	0.251	4.20	0.251
Hexane	U	0.246	U	0.246	2.31	0.246	2.26	0.246	2.22	0.246
Chloroform	U	0.341	U	0.341	6.07	0.341	5.94	0.341	5.84	0.341
Tetrahydrofuran	U	0.206	U	0.206	U	0.206	U	0.206	0.768	0.206
1,2-Dichloroethane	U	0.282								
1,1,1-Trichloroethane	U	0.381								
Benzene	U	0.223	U	0.223	0.981	0.223	0.938	0.223	0.954	0.223
Carbon Tetrachloride	U	0.439	U	0.439	0.481	0.439	0.459	0.439	U	0.439
Cyclohexane	U	0.240								
1,2-Dichloropropane	U	0.322								
1,4-Dioxane	U	0.251								
Trichloroethene	U	0.375								
Heptane	U	0.286	U	0.286	0.897	0.286	0.688	0.286	0.981	0.286
cis-1,3-Dichloropropene	U	0.317								
Methyl Isobutyl Ketone	U	0.286	U	0.286	1.08	0.286	1.77	0.286	0.967	0.286
trans-1,3-Dichloropropene	U	0.317								
1,1,2-Trichloroethane	U	0.381								
Toluene	U	0.263	U	0.263	12.7	0.263	12.5	0.263	12.0	0.263
2-Hexanone	U	0.286								
Dibromochloromethane	U	0.594								
1,2-Dibromoethane	U	0.536								
Tetrachloroethene	U	0.473	U	0.473	0.604	0.473	0.749	0.473	0.637	0.473
Chlorobenzene	U	0.321								
Ethylbenzene	U	0.303	U	0.303	1.32	0.303	1.28	0.303	1.23	0.303
m&p-Xylene	U	0.303	U	0.303	4.30	0.303	4.08	0.303	4.00	0.303
Bromoform	U	0.721								
Styrene	U	0.297	U	0.297	0.447	0.297	0.441	0.297	0.424	0.297
1,1,2,2-Tetrachloroethane	U	0.479								
o-Xylene	U	0.303	U	0.303	1.78	0.303	1.68	0.303	1.65	0.303
p-Ethyltoluene	U	0.343	U	0.343	1.46	0.343	1.44	0.343	1.38	0.343
1,3,5-Trimethylbenzene	U	0.343	U	0.343	1.23	0.343	1.17	0.343	1.18	0.343
1,2,4-Trimethylbenzene	U	0.343	U	0.343	3.45	0.343	3.18	0.343	3.19	0.343
1,3-Dichlorobenzene	U	0.419								
1,4-Dichlorobenzene	U	0.419	U	0.419	0.465	0.419	0.421	0.419	0.455	0.419
1,2-Dichlorobenzene	U	0.419								

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	R203001-19	R203001-20	R203001-21	R203001-22	R203001-23					
Sample Number	0-130-1017	0-130-1023	0-130-1024	0-130-1025	0-130-1026					
Sample Location	EQP-IA2	EQP-IA5	EQP-IA4	EQP-AMB1	EQP-AMB2					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Propylene	U	0.120								
Dichlorodifluoromethane	1.57	0.345	1.57	0.345	1.74	0.345	1.72	0.345	1.82	0.345
Chloromethane	1.37	0.144	1.44	0.144	1.52	0.144	1.46	0.144	1.64	0.144
Dichlorotetrafluoroethane	U	0.488								
Vinyl Chloride	U	0.178								
1,3-Butadiene	U	0.154								
Bromomethane	U	0.271								
Chloroethane	U	0.184								
Acetone	107	0.552	63.5	0.552	115	0.552	12.5	0.552	14.9	0.552
Trichlorofluoromethane	1.13	0.392	1.24	0.392	1.16	0.392	1.10	0.392	1.19	0.392
Isopropyl Alcohol	U	2.85	U	2.85	U	2.85	U	2.85	8.42	J 2.85
1,1-Dichloroethene	U	0.277								
Methylene Chloride	0.776	0.242	0.342	0.242	0.431	0.242	0.343	0.242	0.279	0.242
Trichlorotrifluoroethane	U	0.535	0.614	0.535	0.637	0.535	U	0.535	0.648	0.535
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
MTBE	U	0.252								
Vinyl Acetate	U	J 0.246								
2-Butanone	1.92	0.206	1.85	0.206	2.12	0.206	2.02	0.206	2.72	0.206
cis-1,2-Dichloroethene	U	0.277								
Ethyl Acetate	3.93	0.251	1.00	0.251	1.63	0.251	2.15	0.251	2.57	0.251
Hexane	2.38	0.246	1.31	0.246	1.75	0.246	1.75	0.246	1.55	0.246
Chloroform	5.80	0.341	7.40	0.341	15.9	0.341	U	0.341	0.602	0.341
Tetrahydrofuran	0.890	0.206	0.957	0.206	0.347	0.206	1.38	0.206	1.14	0.206
1,2-Dichloroethane	U	0.282								
1,1,1-Trichloroethane	U	0.381								
Benzene	0.913	0.223	0.738	0.223	0.918	0.223	0.846	0.223	0.788	0.223
Carbon Tetrachloride	0.471	0.439	0.504	0.439	0.519	0.439	U	0.439	U	0.439
Cyclohexane	U	0.240								
1,2-Dichloropropane	U	0.322								
1,4-Dioxane	U	0.251								
Trichloroethene	U	0.375								
Heptane	0.722	0.286	0.434	0.286	U	0.286	0.530	0.286	0.530	0.286
cis-1,3-Dichloropropene	U	0.317								
Methyl Isobutyl Ketone	0.937	0.286	1.43	0.286	1.26	0.286	U	0.286	U	0.286
trans-1,3-Dichloropropene	U	0.317								
1,1,2-Trichloroethane	U	0.381								
Toluene	12.3	0.263	10.3	0.263	7.27	0.263	6.35	0.263	5.97	0.263
2-Hexanone	U	0.286								
Dibromochloromethane	U	0.594								
1,2-Dibromoethane	U	0.536								
Tetrachloroethene	0.590	0.473	U	0.473	U	0.473	U	0.473	U	0.473
Chlorobenzene	U	0.321								
Ethylbenzene	1.31	0.303	0.809	0.303	1.03	0.303	0.708	0.303	0.845	0.303
m&p-Xylene	4.23	0.303	2.87	0.303	3.37	0.303	2.40	0.303	2.52	0.303
Bromoform	U	0.721								
Styrene	0.402	0.297	0.307	0.297	0.540	0.297	U	0.297	U	0.297
1,1,2,2-Tetrachloroethane	U	0.479								
o-Xylene	1.72	0.303	1.14	0.303	1.38	0.303	0.881	0.303	1.02	0.303
p-Ethyltoluene	1.37	0.343	0.561	0.343	1.14	0.343	U	0.343	U	0.343
1,3,5-Trimethylbenzene	1.14	0.343	0.516	0.343	0.915	0.343	U	0.343	U	0.343
1,2,4-Trimethylbenzene	3.23	0.343	1.48	0.343	2.47	0.343	0.961	0.343	0.888	0.343
1,3-Dichlorobenzene	U	0.419								
1,4-Dichlorobenzene	0.464	0.419	U	0.419	0.762	0.419	U	0.419	U	0.419
1,2-Dichlorobenzene	U	0.419								

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	R203001-09	R203001-10	R203001-08	R203001-11	R203001-12
Sample Number	0-130-1028	0-130-1029	0-130-1027	0-130-1034	0-130-1035
Sample Location	EQP-AMB4	EQP-AMB5	EQP-AMB3	EQP-IA6	EQP-IA7
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Propylene	U	0.120	U	0.120	U
Dichlorodifluoromethane	2.07	0.345	1.52	0.345	1.82
Chloromethane	1.86	0.144	1.75	0.144	1.65
Dichlorotetrafluoroethane	U	0.488	U	0.488	U
Vinyl Chloride	U	0.178	U	0.178	U
1,3-Butadiene	U	0.154	U	0.154	U
Bromomethane	U	0.271	U	0.271	U
Chloroethane	U	0.184	U	0.184	U
Acetone	391	11.9	19.0	0.552	1060
Trichlorofluoromethane	1.30	0.392	1.19	0.392	1.15
Isopropyl Alcohol	3.99	J 2.85	6.30	J 2.85	U
1,1-Dichloroethene	U	0.277	U	0.277	U
Methylene Chloride	0.814	0.242	0.444	0.242	2.48
Trichlorotrifluoroethane	0.578	0.535	0.578	0.535	0.562
trans-1,2-Dichloroethene	U	0.277	U	0.277	U
1,1-Dichloroethane	U	0.282	U	0.282	U
MTBE	U	0.252	U	0.252	U
Vinyl Acetate	U	J 0.246	U	J 0.246	U
2-Butanone	3.37	0.206	4.63	0.206	3.73
cis-1,2-Dichloroethene	U	0.277	U	0.277	U
Ethyl Acetate	3.16	0.251	3.62	0.251	4.62
Hexane	3.06	0.246	1.82	0.246	6.49
Chloroform	2.40	0.341	U	0.341	1.69
Tetrahydrofuran	0.803	0.206	0.837	0.206	0.736
1,2-Dichloroethane	U	0.282	U	0.282	U
1,1,1-Trichloroethane	U	0.381	U	0.381	U
Benzene	0.796	0.223	1.08	0.223	1.10
Carbon Tetrachloride	0.459	0.439	U	0.439	U
Cyclohexane	U	0.240	U	0.240	0.309
1,2-Dichloropropane	U	0.322	U	0.322	U
1,4-Dioxane	U	0.251	U	0.251	U
Trichloroethene	U	0.375	U	0.375	U
Heptane	0.598	0.286	0.587	0.286	0.872
cis-1,3-Dichloropropene	U	0.317	U	0.317	U
Methyl Isobutyl Ketone	1.61	0.286	U	0.286	1.64
trans-1,3-Dichloropropene	U	0.317	U	0.317	U
1,1,2-Trichloroethane	U	0.381	U	0.381	U
Toluene	7.50	0.263	13.6	0.263	16.8
2-Hexanone	U	0.286	U	0.286	0.541
Dibromochloromethane	U	0.594	U	0.594	U
1,2-Dibromoethane	U	0.536	U	0.536	U
Tetrachloroethene	U	0.473	U	0.473	0.695
Chlorobenzene	U	0.321	U	0.321	U
Ethylbenzene	0.797	0.303	0.885	0.303	1.46
m&p-Xylene	3.01	0.303	3.02	0.303	6.30
Bromoform	U	0.721	U	0.721	U
Styrene	U	0.297	0.306	0.297	0.317
1,1,2,2-Tetrachloroethane	U	0.479	U	0.479	0.297
o-Xylene	1.37	0.303	1.10	0.303	3.35
p-Ethyltoluene	3.15	0.343	0.362	0.343	10.5
1,3,5-Trimethylbenzene	2.42	0.343	0.382	0.343	8.77
1,2,4-Trimethylbenzene	6.25	0.343	1.25	0.343	0.343
1,3-Dichlorobenzene	U	0.419	U	0.419	22.4
1,4-Dichlorobenzene	U	0.419	U	0.419	0.419
1,2-Dichlorobenzene	U	0.419	U	0.419	0.419

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	R203001-13	R203001-14	R203001-15			
Sample Number	0-130-1036	0-130-1038	0-130-1040			
Sample Location	EQP-IA7	EQP-IA8	EQP-IA9			
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Propylene	U	0.120	U	0.120	U	0.120
Dichlorodifluoromethane	1.15	0.345	1.77	0.345	1.78	0.345
Chloromethane	1.05	0.144	1.64	0.144	1.50	0.144
Dichlorotetrafluoroethane	U	0.488	U	0.488	U	0.488
Vinyl Chloride	U	0.178	U	0.178	U	0.178
1,3-Butadiene	U	0.154	U	0.154	U	0.154
Bromomethane	U	0.271	U	0.271	U	0.271
Chloroethane	U	0.184	U	0.184	U	0.184
Acetone	21000	95.0	20300	95.0	913	11.9
Trichlorofluoromethane	1.32	0.392	1.11	0.392	1.19	0.392
Isopropyl Alcohol	U	2.85	3.80	J 2.85	36.5	J 2.85
1,1-Dichloroethene	U	0.277	U	0.277	U	0.277
Methylene Chloride	118	0.242	600	5.21	1.12	0.242
Trichlorotrifluoroethane	0.613	0.535	0.595	0.535	0.627	0.535
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282	U	0.282
MTBE	U	0.252	U	0.252	U	0.252
Vinyl Acetate	U J	0.246	U J	0.246	U J	0.246
2-Butanone	4.00	0.206	14.5	0.206	24.2	0.206
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277
Ethyl Acetate	0.279	0.251	17.8	0.251	145	0.251
Hexane	35.8	0.246	31.6	0.246	5.11	0.246
Chloroform	1.90	0.341	0.818	0.341	2.27	0.341
Tetrahydrofuran	4.57	0.206	3.08	0.206	U	0.206
1,2-Dichloroethane	U	0.282	U	0.282	1.04	0.282
1,1,1-Trichloroethane	U	0.381	0.431	0.381	U	0.381
Benzene	1.69	0.223	2.93	0.223	2.17	0.223
Carbon Tetrachloride	0.439	0.439	U	0.439	U	0.439
Cyclohexane	2.05	0.240	4.68	0.240	0.793	0.240
1,2-Dichloropropane	U	0.322	U	0.322	U	0.322
1,4-Dioxane	U	0.251	U	0.251	U	0.251
Trichloroethene	U	0.375	U	0.375	U	0.375
Heptane	1.46	0.286	1.98	0.286	5.24	0.286
cis-1,3-Dichloropropene	U	0.317	U	0.317	U	0.317
Methyl Isobutyl Ketone	7.42	0.286	7.32	0.286	0.423	0.286
trans-1,3-Dichloropropene	U	0.317	U	0.317	U	0.317
1,1,2-Trichloroethane	U	0.381	U	0.381	U	0.381
Toluene	152	0.263	144	0.263	814	5.65
2-Hexanone	U	0.286	U	0.286	0.345	0.286
Dibromochloromethane	U	0.594	U	0.594	U	0.594
1,2-Dibromoethane	U	0.536	U	0.536	U	0.536
Tetrachloroethene	12.4	0.473	47.5	0.473	U	0.473
Chlorobenzene	U	0.321	U	0.321	U	0.321
Ethylbenzene	3.21	0.303	3.73	0.303	18.3	0.303
m&p-Xylene	14.6	0.303	14.4	0.303	68.7	0.303
Bromoform	U	0.721	U	0.721	U	0.721
Styrene	0.439	0.297	0.737	0.297	1.97	0.297
1,1,2,2-Tetrachloroethane	U	0.479	U	0.479	U	0.479
o-Xylene	17.9	0.303	12.2	0.303	21.6	0.303
p-Ethyltoluene	200	0.343	105	0.343	25.5	0.343
1,3,5-Trimethylbenzene	154	0.343	78.0	0.343	21.5	0.343
1,2,4-Trimethylbenzene	429	7.37	187	0.343	102	0.343
1,3-Dichlorobenzene	U	0.419	U	0.419	U	0.419
1,4-Dichlorobenzene	0.459	0.419	0.628	0.419	1.39	0.419
1,2-Dichlorobenzene	U	0.419	U	0.419	U	0.419

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Table 2.1 Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 1 of 5

Sample ID: LCS 03/03/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.995	97	31 - 133
Dichlorodifluoromethane	1.05	0.758	72	58 - 140
Chloromethane	1.03	0.839	82	52 - 134
Dichlorotetrafluoroethane	1.03	0.966	94	54 - 136
Vinyl Chloride	1.03	0.917	89	53 - 130
1,3-Butadiene	1.04	0.790	76	33 - 130
Bromomethane	1.05	1.00	95	41 - 140
Chloroethane	1.05	0.846	81	44 - 139
Acetone	0.997	0.937	94	35 - 151
Trichlorofluoromethane	1.06	1.01	95	50 - 148
Isopropyl Alcohol	1.07	0.567	53	19 - 166
1,1-Dichloroethene	1.05	0.915	87	49 - 128
Methylene Chloride	1.05	0.910	87	35 - 134
Trichlorotrifluoroethane	1.05	1.10	105	40 - 160
trans-1,2-Dichloroethene	1.05	0.897	85	62 - 123
1,1-Dichloroethane	1.05	0.900	86	64 - 133
MTBE	1.05	0.888	85	56 - 130
Vinyl Acetate	1.06	0.854	81	65 - 117
2-Butanone	1.03	0.932	91	38 - 157
cis-1,2-Dichloroethene	1.05	0.906	86	61 - 129
Ethyl Acetate	1.02	0.923	91	54 - 158
Hexane	1.04	0.918	88	67 - 121
Chloroform	1.02	0.974	96	62 - 141
Tetrahydrofuran	1.06	0.914	86	46 - 119
1,2-Dichloroethane	1.05	0.962	92	59 - 139
1,1,1-Trichloroethane	1.05	0.794	76	53 - 160
Benzene	1.05	0.744	71	62 - 123
Carbon Tetrachloride	1.04	0.877	84	56 - 159
Cyclohexane	1.05	0.800	76	59 - 133
1,2-Dichloropropane	1.05	0.766	73	51 - 149
1,4-Dioxane	1.04	0.939	90	10 - 170
Trichloroethene	1.04	0.903	87	72 - 133
Heptane	1.03	0.792	77	35 - 172
cis-1,3-Dichloropropene	1.08	0.785	73	66 - 156
Methyl Isobutyl Ketone	1.02	0.839	82	10 - 200
trans-1,3-Dichloropropene	1.06	0.785	74	52 - 158
1,1,2-Trichloroethane	1.03	0.875	85	62 - 143
Toluene	1.05	0.855	81	64 - 133
2-Hexanone	1.07	0.895	84	10 - 200
Dibromo-chloromethane	1.06	0.915	86	64 - 151
1,2-Dibromoethane	1.04	0.901	87	65 - 143
Tetrachloroethene	1.04	0.942	91	66 - 138
Chlorobenzene	1.06	0.903	85	62 - 134
Ethylbenzene	1.06	0.889	84	61 - 139
m&p-Xylene	2.07	0.884	43	14 - 175
Bromoform	1.03	0.985	96	68 - 142
Styrene	1.05	0.908	87	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.895	89	43 - 156
o-Xylene	1.06	0.905	85	53 - 150
p-Ethyltoluene	1.06	1.01	95	59 - 129
1,3,5-Trimethylbenzene	1.06	0.960	91	39 - 125
1,2,4-Trimethylbenzene	1.04	0.971	93	24 - 131
1,3-Dichlorobenzene	1.03	1.08	105	57 - 124
1,4-Dichlorobenzene	1.03	1.08	105	56 - 128
1,2-Dichlorobenzene	1.05	1.11	106	46 - 117

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

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Sample ID: LCS 03/04/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	1.09	106	31 - 133
Dichlorodifluoromethane	1.05	0.842	80	58 - 140
Chloromethane	1.03	0.921	89	52 - 134
Dichlorotetrafluoroethane	1.03	0.971	94	54 - 136
Vinyl Chloride	1.03	0.913	89	53 - 130
1,3-Butadiene	1.04	0.776	75	33 - 130
Bromomethane	1.05	0.993	95	41 - 140
Chloroethane	1.05	0.892	85	44 - 139
Acetone	0.997	0.930	93	35 - 151
Trichlorofluoromethane	1.06	0.978	92	50 - 148
Isopropyl Alcohol	1.07	0.663	62	19 - 166
1,1-Dichloroethene	1.05	0.930	89	49 - 128
Methylene Chloride	1.05	0.906	86	35 - 134
Trichlorotrifluoroethane	1.05	1.19	113	40 - 160
trans-1,2-Dichloroethene	1.05	0.929	89	62 - 123
1,1-Dichloroethane	1.05	0.974	93	64 - 133
MTBE	1.05	1.01	96	56 - 130
Vinyl Acetate	1.06	0.714	67	65 - 117
2-Butanone	1.03	1.02	99	38 - 157
cis-1,2-Dichloroethene	1.05	0.968	92	61 - 129
Ethyl Acetate	1.02	0.934	92	54 - 158
Hexane	1.04	0.958	92	67 - 121
Chloroform	1.02	1.03	101	62 - 141
Tetrahydrofuran	1.06	0.885	84	46 - 119
1,2-Dichloroethane	1.05	0.973	93	59 - 139
1,1,1-Trichloroethane	1.05	0.842	80	53 - 160
Benzene	1.05	0.781	74	62 - 123
Carbon Tetrachloride	1.04	0.866	83	56 - 159
Cyclohexane	1.05	0.873	83	59 - 133
1,2-Dichloropropane	1.05	0.825	79	51 - 149
1,4-Dioxane	1.04	0.869	84	10 - 170
Trichloroethene	1.04	1.01	97	72 - 133
Heptane	1.03	0.810	79	35 - 172
cis-1,3-Dichloropropene	1.08	0.896	83	66 - 156
Methyl Isobutyl Ketone	1.02	0.825	81	10 - 200
trans-1,3-Dichloropropene	1.06	0.803	76	52 - 158
1,1,2-Trichloroethane	1.03	0.894	87	62 - 143
Toluene	1.05	0.890	85	64 - 133
2-Hexanone	1.07	0.799	75	10 - 200
Dibromochloromethane	1.06	0.940	89	64 - 151
1,2-Dibromoethane	1.04	0.907	87	65 - 143
Tetrachloroethene	1.04	0.966	93	66 - 138
Chlorobenzene	1.06	0.922	87	62 - 134
Ethylbenzene	1.06	0.933	88	61 - 139
m&p-Xylene	2.07	1.75	85	14 - 175
Bromoform	1.03	0.956	93	68 - 142
Styrene	1.05	0.925	88	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.769	76	43 - 156
o-Xylene	1.06	0.933	88	53 - 150
p-Ethyltoluene	1.06	0.995	94	59 - 129
1,3,5-Trimethylbenzene	1.06	0.952	90	39 - 125
1,2,4-Trimethylbenzene	1.04	0.993	96	24 - 131
1,3-Dichlorobenzene	1.03	1.04	101	57 - 124
1,4-Dichlorobenzene	1.03	1.04	101	56 - 128
1,2-Dichlorobenzene	1.05	1.05	100	46 - 117

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

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Sample ID: LCS 03/04/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	1.11	108	31 - 133
Dichlorodifluoromethane	1.05	0.839	80	58 - 140
Chloromethane	1.03	0.918	89	52 - 134
Dichlorotetrafluoroethane	1.03	0.973	95	54 - 136
Vinyl Chloride	1.03	0.939	91	53 - 130
1,3-Butadiene	1.04	0.784	75	33 - 130
Bromomethane	1.05	0.998	95	41 - 140
Chloroethane	1.05	0.866	83	44 - 139
Acetone	0.997	0.855	86	35 - 151
Trichlorofluoromethane	1.06	0.982	93	50 - 148
Isopropyl Alcohol	1.07	0.634	59	19 - 166
1,1-Dichloroethene	1.05	0.938	89	49 - 128
Methylene Chloride	1.05	0.893	85	35 - 134
Trichlorotrifluoroethane	1.05	1.19	113	40 - 160
trans-1,2-Dichloroethene	1.05	0.924	88	62 - 123
1,1-Dichloroethane	1.05	0.960	91	64 - 133
MTBE	1.05	0.977	93	56 - 130
Vinyl Acetate	1.06	0.669	63	* 65 - 117
2-Butanone	1.03	0.969	94	38 - 157
cis-1,2-Dichloroethene	1.05	0.962	92	61 - 129
Ethyl Acetate	1.02	0.916	90	54 - 158
Hexane	1.04	0.950	91	67 - 121
Chloroform	1.02	1.02	100	62 - 141
Tetrahydrofuran	1.06	0.841	79	46 - 119
1,2-Dichloroethane	1.05	0.973	93	59 - 139
1,1,1-Trichloroethane	1.05	0.845	81	53 - 160
Benzene	1.05	0.782	75	62 - 123
Carbon Tetrachloride	1.04	0.863	83	56 - 159
Cyclohexane	1.05	0.876	83	59 - 133
1,2-Dichloropropane	1.05	0.819	78	51 - 149
1,4-Dioxane	1.04	0.819	79	10 - 170
Trichloroethene	1.04	1.02	98	72 - 133
Heptane	1.03	0.821	80	35 - 172
cis-1,3-Dichloropropene	1.08	0.875	81	66 - 156
Methyl Isobutyl Ketone	1.02	0.780	77	10 - 200
trans-1,3-Dichloropropene	1.06	0.787	74	52 - 158
1,1,2-Trichloroethane	1.03	0.873	85	62 - 143
Toluene	1.05	0.875	83	64 - 133
2-Hexanone	1.07	0.759	71	10 - 200
Dibromo-chloromethane	1.06	0.917	87	64 - 151
1,2-Dibromoethane	1.04	0.892	86	65 - 143
Tetrachloroethene	1.04	0.953	92	66 - 138
Chlorobenzene	1.06	0.899	85	62 - 134
Ethylbenzene	1.06	0.910	86	61 - 139
m&p-Xylene	2.07	1.71	83	14 - 175
Bromoform	1.03	0.932	91	68 - 142
Styrene	1.05	0.899	86	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.761	75	43 - 156
o-Xylene	1.06	0.917	87	53 - 150
p-Ethyltoluene	1.06	0.961	91	59 - 129
1,3,5-Trimethylbenzene	1.06	0.913	86	39 - 125
1,2,4-Trimethylbenzene	1.04	0.931	90	24 - 131
1,3-Dichlorobenzene	1.03	1.01	98	57 - 124
1,4-Dichlorobenzene	1.03	1.02	99	56 - 128
1,2-Dichlorobenzene	1.05	1.01	96	46 - 117

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 4 of 5

Sample ID: LCS 03/04/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.939	91	31 - 133
Dichlorodifluoromethane	1.05	1.05	100	58 - 140
Chloromethane	1.03	0.872	85	52 - 134
Dichlorotetrafluoroethane	1.03	0.936	91	54 - 136
Vinyl Chloride	1.03	0.877	85	53 - 130
1,3-Butadiene	1.04	0.750	72	33 - 130
Bromomethane	1.05	0.944	90	41 - 140
Chloroethane	1.05	0.842	80	44 - 139
Acetone	0.997	0.773	78	35 - 151
Trichlorofluoromethane	1.06	0.935	88	50 - 148
Isopropyl Alcohol	1.07	0.562	53	19 - 166
1,1-Dichloroethene	1.05	0.885	84	49 - 128
Methylene Chloride	1.05	0.844	80	35 - 134
Trichlorotrifluoroethane	1.05	1.13	108	40 - 160
trans-1,2-Dichloroethene	1.05	0.884	84	62 - 123
1,1-Dichloroethane	1.05	0.931	89	64 - 133
MTBE	1.05	0.894	85	56 - 130
Vinyl Acetate	1.06	0.793	75	65 - 117
2-Butanone	1.03	0.891	87	38 - 157
cis-1,2-Dichloroethene	1.05	0.914	87	61 - 129
Ethyl Acetate	1.02	0.912	89	54 - 158
Hexane	1.04	0.908	87	67 - 121
Chloroform	1.02	0.975	96	62 - 141
Tetrahydrofuran	1.06	0.784	74	46 - 119
1,2-Dichloroethane	1.05	0.931	89	59 - 139
1,1,1-Trichloroethane	1.05	0.807	77	53 - 160
Benzene	1.05	0.758	72	62 - 123
Carbon Tetrachloride	1.04	0.858	83	56 - 159
Cyclohexane	1.05	0.826	79	59 - 133
1,2-Dichloropropane	1.05	0.807	77	51 - 149
1,4-Dioxane	1.04	0.756	73	10 - 170
Trichloroethene	1.04	0.922	89	72 - 133
Heptane	1.03	0.806	78	35 - 172
cis-1,3-Dichloropropene	1.08	0.867	80	66 - 156
Methyl Isobutyl Ketone	1.02	0.722	71	10 - 200
trans-1,3-Dichloropropene	1.06	0.809	76	52 - 158
1,1,2-Trichloroethane	1.03	0.870	85	62 - 143
Toluene	1.05	0.847	81	64 - 133
2-Hexanone	1.07	0.692	65	10 - 200
Dibromo-chloromethane	1.06	0.902	85	64 - 151
1,2-Dibromoethane	1.04	0.876	84	65 - 143
Tetrachloroethene	1.04	0.918	88	66 - 138
Chlorobenzene	1.06	0.861	81	62 - 134
Ethylbenzene	1.06	0.869	82	61 - 139
m&p-Xylene	2.07	1.64	79	14 - 175
Bromoform	1.03	0.906	88	68 - 142
Styrene	1.05	0.869	83	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.776	77	43 - 156
o-Xylene	1.06	0.857	81	53 - 150
p-Ethyltoluene	1.06	0.888	84	59 - 129
1,3,5-Trimethylbenzene	1.06	0.859	81	39 - 125
1,2,4-Trimethylbenzene	1.04	0.883	85	24 - 131
1,3-Dichlorobenzene	1.03	0.944	92	57 - 124
1,4-Dichlorobenzene	1.03	0.955	93	56 - 128
1,2-Dichlorobenzene	1.05	0.944	90	46 - 117

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 5 of 5

Sample ID: LCS 03/05/12

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.876	85	31 - 133
Dichlorodifluoromethane	1.05	0.962	92	58 - 140
Chloromethane	1.03	0.803	78	52 - 134
Dichlorotetrafluoroethane	1.03	0.886	86	54 - 136
Vinyl Chloride	1.03	0.840	82	53 - 130
1,3-Butadiene	1.04	0.699	67	33 - 130
Bromomethane	1.05	0.890	85	41 - 140
Chloroethane	1.05	0.794	76	44 - 139
Acetone	0.997	0.738	74	35 - 151
Trichlorofluoromethane	1.06	0.883	83	50 - 148
Isopropyl Alcohol	1.07	0.534	50	19 - 166
1,1-Dichloroethene	1.05	0.826	79	49 - 128
Methylene Chloride	1.05	0.815	78	35 - 134
Trichlorotrifluoroethane	1.05	1.05	100	40 - 160
trans-1,2-Dichloroethene	1.05	0.828	79	62 - 123
1,1-Dichloroethane	1.05	0.853	81	64 - 133
MTBE	1.05	0.840	80	56 - 130
Vinyl Acetate	1.06	0.737	70	65 - 117
2-Butanone	1.03	0.848	82	38 - 157
cis-1,2-Dichloroethene	1.05	0.856	82	61 - 129
Ethyl Acetate	1.02	0.864	85	54 - 158
Hexane	1.04	0.848	82	67 - 121
Chloroform	1.02	0.920	90	62 - 141
Tetrahydrofuran	1.06	0.741	70	46 - 119
1,2-Dichloroethane	1.05	0.877	84	59 - 139
1,1,1-Trichloroethane	1.05	0.792	75	53 - 160
Benzene	1.05	0.718	68	62 - 123
Carbon Tetrachloride	1.04	0.826	79	56 - 159
Cyclohexane	1.05	0.803	77	59 - 133
1,2-Dichloropropane	1.05	0.749	71	51 - 149
1,4-Dioxane	1.04	0.712	69	10 - 170
Trichloroethene	1.04	0.878	84	72 - 133
Heptane	1.03	0.747	73	35 - 172
cis-1,3-Dichloropropene	1.08	0.818	76	66 - 156
Methyl Isobutyl Ketone	1.02	0.696	68	10 - 200
trans-1,3-Dichloropropene	1.06	0.757	71	52 - 158
1,1,2-Trichloroethane	1.03	0.806	78	62 - 143
Toluene	1.05	0.795	76	64 - 133
2-Hexanone	1.07	0.665	62	10 - 200
Dibromo-chloromethane	1.06	0.857	81	64 - 151
1,2-Dibromoethane	1.04	0.830	80	65 - 143
Tetrachloroethene	1.04	0.870	84	66 - 138
Chlorobenzene	1.06	0.813	77	62 - 134
Ethylbenzene	1.06	0.812	77	61 - 139
m&p-Xylene	2.07	1.56	75	14 - 175
Bromoform	1.03	0.875	85	68 - 142
Styrene	1.05	0.826	79	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.742	74	43 - 156
o-Xylene	1.06	0.825	78	53 - 150
p-Ethyltoluene	1.06	0.850	80	59 - 129
1,3,5-Trimethylbenzene	1.06	0.821	78	39 - 125
1,2,4-Trimethylbenzene	1.04	0.839	81	24 - 131
1,3-Dichlorobenzene	1.03	0.899	87	57 - 124
1,4-Dichlorobenzene	1.03	0.902	88	56 - 128
1,2-Dichlorobenzene	1.05	0.915	87	46 - 117

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Table 2.2 Results of the Duplicate Analysis for VOC in Air
WA# SERAS-130 Cabo Rojo Site

Page 1 of 3

Sample ID: 0-130-1009

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25

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Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 2 of 3

Sample ID: 0-130-1014

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Propylene	U	U	NC	≤25
Dichlorodifluoromethane	0.365	0.330	10	≤25
Chloromethane	0.736	0.683	7	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	48.5	46.5	4	≤25
Trichlorofluoromethane	0.221	0.207	7	≤25
Isopropyl Alcohol	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.239	0.231	3	≤25
Trichlorotrifluoroethane	0.0790	0.0762	4	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	1.15	1.09	5	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Ethyl Acetate	1.30	1.27	2	≤25
Hexane	0.654	0.610	7	≤25
Chloroform	1.24	1.20	3	≤25
Tetrahydrofuran	U	0.0904	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
1,1,1-Trichloroethane	U	U	NC	≤25
Benzene	0.307	0.290	6	≤25
Carbon Tetrachloride	0.0765	0.0728	5	≤25
Cyclohexane	U	U	NC	≤25
1,2-Dichloropropane	U	U	NC	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Heptane	0.219	0.267	20	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	0.264	0.245	7	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	3.36	3.17	6	≤25
2-Hexanone	U	U	NC	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	0.0891	0.0853	4	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	0.305	0.291	5	≤25
m&p-Xylene	0.991	0.932	6	≤25
Bromoform	U	U	NC	≤25
Styrene	0.105	0.100	5	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	0.410	0.383	7	≤25
p-Ethyltoluene	0.297	0.276	7	≤25
1,3,5-Trimethylbenzene	0.251	0.231	8	≤25
1,2,4-Trimethylbenzene	0.702	0.666	5	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	0.0773	0.0738	5	≤25
1,2-Dichlorobenzene	U	U	NC	≤25

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Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 3 of 3

Sample ID: 0-130-1027

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Propylene	U	U	NC	≤25
Dichlorodifluoromethane	0.368	0.332	10	≤25
Chloromethane	0.798	0.791	0.9	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	446	468	5	≤25
Trichlorofluoromethane	0.205	0.201	2	≤25
Isopropyl Alcohol	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.714	0.701	2	≤25
Trichlorotrifluoroethane	0.0733	0.0740	1	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	1.26	1.22	3	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Ethyl Acetate	1.28	1.26	2	≤25
Hexane	1.84	1.84	0	≤25
Chloroform	0.346	0.347	0.3	≤25
Tetrahydrofuran	0.250	0.253	1	≤25
1,2-Dichloroethane	U	U	NC	≤25
1,1,1-Trichloroethane	U	U	NC	≤25
Benzene	0.345	0.312	10	≤25
Carbon Tetrachloride	U	U	NC	≤25
Cyclohexane	0.0899	0.0920	2	≤25
1,2-Dichloropropane	U	U	NC	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Heptane	0.213	0.217	2	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	0.401	0.359	10	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	4.46	4.24	5	≤25
2-Hexanone	0.132	0.130	2	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	0.103	0.0996	3	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	0.337	0.321	5	≤25
m&p-Xylene	1.45	1.37	6	≤25
Bromoform	U	U	NC	≤25
Styrene	0.0745	0.0732	2	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	0.771	0.735	5	≤25
p-Ethyltoluene	2.14	2.01	6	≤25
1,3,5-Trimethylbenzene	1.78	1.66	7	≤25
1,2,4-Trimethylbenzene	4.56	4.25	7	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	U	U	NC	≤25
1,2-Dichlorobenzene	U	U	NC	≤25

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CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/1/12-0008

Cooler #: 3
Lab: SERAS 21

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop_Date	Stop_Time
-01	0-130-1009	S2B-IA2	TO-15 (Chlorinated)	Air	1	SUMMA	14072	13948	-30	3/1/2012	6:43:00 AM
-02	0-130-1010	S2B-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	14070	14045	-30	3/1/2012	6:42:00 AM
-03	0-130-1011	S2B-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	206	13925	-30	3/1/2012	6:42:00 AM
-04	0-130-1030	S2B-AMB1	TO-15 (Chlorinated)	Air	1	SUMMA	238	13995	-30	3/1/2012	8:48:00 AM
-05	0-130-1031	S2B-AMB2	TO-15 (Chlorinated)	Air	1	SUMMA	14068	14027	-30	3/1/2012	8:50:00 AM
-06	0-130-1032	S2B-AMB3	TO-15 (Chlorinated)	Air	1	SUMMA	27	13792	-30	3/1/2012	8:45:00 AM
-07	0-130-1056	Trip Blank	TO-15 (Full List)	Air	1	SUMMA	54	—	-30	3/1/12	1:00:00 PM

muc

Special Instructions: Analyze per PWA. Samples 0-130-1009 through 1032 analyzed for chlorinated VOC list only. Trip blank gets full TO-15 analysis.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Analyses	mg Peralta	3/1/12	BK	3/2/12	11:00						

USEPA

DateShipped: 3/1/2012

CarrierName: FedEx

AirbillNo: 899458692181

R203001

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/1/12-0007

Cooler #: 22

Lab: SERAS²²

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
-08	0-130-1027	EQP-AMB3	TO-15 (Full List)	Air	1	SUMMA	75	14049	-30	3/1/2012	8:24:00 AM
-09	0-130-1028	EQP-AMB4	TO-15 (Full List)	Air	1	SUMMA	59	13987	-30	3/1/2012	8:24:00 AM
-10	0-130-1029	EQP-AMB5	TO-15 (Full List)	Air	1	SUMMA	180	13802	-30	3/1/2012	8:32:00 AM
-11	0-130-1034	EQP-IA6	TO-15 (Full List)	Air	1	SUMMA	213	13786	-30	3/1/2012	9:30:00 AM
-12	0-130-1035	EQP-IA7	TO-15 (Full List)	Air	1	SUMMA	8	13993	-30	3/1/2012	9:32:00 AM
-13	0-130-1036	EQP-IA7	TO-15 (Full List)	Air	1	SUMMA	186	13952	-30	3/1/2012	9:32:00 AM
-14	0-130-1038	EQP-IA8	TO-15 (Full List)	Air	1	SUMMA	138	14048	-30	3/1/2012	9:34:00 AM
-15	0-130-1040	EQP-IA9	TO-15 (Full List)	Air	1	SUMMA	200	13782	-30	3/1/2012	10:18:00 AM

Special Instructions: Analyze per PWA. Full TO-15 list.

SAMPLES TRANSFERRED FROM

NOTE - Samples 0-130-1027, 1034, 1035, 1036, 1038 and 1040 are indoor air/ambient samples collected in/near a print shop and a freshly painted building and should be analyzed last.

CHAIN OF CUSTODY

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	<i>Michael</i>	3/1/12	<i>BP</i>	3/2/12	1100						

USEPA

Date Shipped: 3/1/2012

Carrier Name: FedEx

Airbill No: 899458692181

R203601

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/1/12-0006

Cooler #: 1 23

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressur e	Stop_Da te	Stop_Ti me
-16	0-130-1014	EQP-IA1	TO-15 (Full List)	Air	1	SUMMA	245	13926	-30	3/1/2012	7:48:00 AM
-17	0-130-1015	EQP-IA1	TO-15 (Full List)	Air	1	SUMMA	118	14006	-30	3/1/2012	7:48:00 AM
-18	0-130-1016	EQP-IA3	TO-15 (Full List)	Air	1	SUMMA	258	13908	-30	3/1/2012	7:44:00 AM
-19	0-130-1017	EQP-IA2	TO-15 (Full List)	Air	1	SUMMA	201	13947	-30	3/1/2012	7:46:00 AM
-20	0-130-1023	EQP-IA5	TO-15 (Full List)	Air	1	SUMMA	260	14004	-30	3/1/2012	7:52:00 AM
-21	0-130-1024	EQP-IA4	TO-15 (Full List)	Air	1	SUMMA	14069	13793	-30	3/1/2012	7:50:00 AM
-22	0-130-1025	EQP-AMB1	TO-15 (Full List)	Air	1	SUMMA	193	13932	-30	3/1/2012	8:14:00 AM
-23	0-130-1026	EQP-AMB2	TO-15 (Full List)	Air	1	SUMMA	45	13781	-30	3/1/2012	8:18:00 AM

MC

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Special Instructions: Analyze per PWA. Full TO-15 list.

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Au/Analysis	MC	3/1/12	Bob	3/2/12	1100						

ANALYTICAL REPORT

Prepared by

Lockheed Martin Information Systems and Global Services/Environmental Services
Scientific, Engineering, Response and Analytical Services

Cabo Rojo Site
Puerto Rico

March 2012

EPA Work Assignment No. SERAS-130
LOCKHEED MARTIN Work Order SER0130
EPA Contract No. EP-W-09-031

Submitted to
J. Catanzarita
EPA/ERT

2890 Woodbridge Avenue
Edison NJ 08837

V. Kansal

Date

Analytical Support Leader

D. Killeen

3/19/12
Date

QA/QC Officer

D. Miller

3/19/12
Date

Program Manager

Analysis by:
ERT/SERAS

Prepared by:
Y. Mehra

Validated by:
A. LoSurdo

REPORT OF LABORATORY ANALYSIS

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X 032

Appendices will be furnished on request.



TESTING LABORATORIES INFORMATION

Analysis of Volatile Organic Compounds in Air (SERAS SOP# 1814, EPA Method TO-15)

ERT/SERAS Laboratory
2890 Woodbridge Avenue
Edison, NJ 08837

All analyses were performed according to our NELAP-approved quality assurance program. The test results meet the requirements of the current NELAP standards, where applicable, except as noted in the laboratory case narrative provided. Results are intended to be considered in their entirety and apply only to those analyzed and reported herein.

ERT/SERAS Laboratory is certified by the New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID # 12023 for TO-15 analysis in air.



Detailed Sample Information

<u>SERAS SAMPLE #</u>	<u>Field Sample #</u>
R203001-24	0-130-1004
R203001-25	0-130-1005
R203001-26	0-130-1044
R203001-27	0-130-1045
R203001-28	0-130-1046
R203001-29	0-130-1049
R203001-30	0-130-1050
R203001-31	0-130-1054
R203001-32	0-130-1012
R203001-33	0-130-1013
R203001-34	0-130-1018
R203001-35	0-130-1019
R203001-36	0-130-1020
R203001-37	0-130-1021
R203001-38	0-130-1022
R203001-39	0-130-1055
R203001-40	0-130-1001
R203001-41	0-130-1002
R203001-42	0-130-1006
R203001-43	0-130-1007
R203001-44	0-130-1008
R203001-45	0-130-1033
R203001-46	0-130-1037
R203001-47	0-130-1039
R203001-48	0-130-1003
R203001-49	0-130-1041
R203001-50	0-130-1042
R203001-51	0-130-1043
R203001-52	0-130-1047
R203001-53	0-130-1048
R203001-54	0-130-1051
R203001-55	0-130-1052
R203001-56	0-130-1053
R203001-57	0-130-1057

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Introduction

SERAS personnel, in response to WA# SERAS-130, provided analytical support for environmental samples collected from the Cabo Rojo Site in Puerto Rico, as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and QA/QC results.

The samples were treated with procedures consistent with those specified in SERAS SOP #1008, *Operation of Sample Refrigeration Units and Sample Receiving, Handling and Storage*.

Chain of Custody #	Number of Samples	Sampling Date	Date Received	Date Analyzed	Matrix	Analysis/Method	Laboratory	Data Package
0-130-3/1/12-0009	8	03/01/12	03/05/12	03/05/12 through 03/07/12	Air	TO-15(VOC) SERAS SOP 1814	ERT/SERAS	X 032
0-130-3/1/12-0010	1				Soil Gas			
	7							
0-130-3/2/12-0011	8							
0-130-3/2/12-0012	8							
0-130-3/2/12-0013	1	03/02/12			Trip Blank			
	1							

Case Narrative

Sampling was conducted as per the site-specific Quality Assurance Project Plan (QAPP) and analyzed by the analytical methods stated in the QAPP. The laboratory reported the data to three significant figures. Any other representation of the data is the responsibility of the user. All data validation flags have been inserted into the results tables.

TO-15 (VOC) in Air Package X 032

Isopropyl alcohol was detected above the reporting limit (RL) in the canisters used to collect samples 0-130-1020 and 0-130-1039 during the SUMMA certification process. The isopropyl alcohol result for these samples are qualified estimated (J) because the results are less than five times the certification result. The RLs were raised to the certification result value; therefore, the results may be biased high.

Isopropyl alcohol did not meet the %RSD criterion for the initial calibration of 9/22/11. Isopropyl alcohol is qualified estimated (J) for sample 0-130-1019.

The low point(s) of the initial calibration were not used to generate the initial calibration curve for acetone and isopropyl alcohol. The RLs are based on the 100 ppt standard for acetone and 500 ppt standard for isopropyl alcohol for samples 0-130-1012, 0-130-1013, 0-130-1018 through 0-130-1022, 0-130-1033, 0-130-1037 and 0-130-1039.

The trip blank contained acetone above the RL. The acetone results for samples 0-130-1012 and 0-130-1021 were qualified non-detect "U" and the RLs were raised to the levels found in the samples.

The results presented in this report only relate to the samples analyzed. All results are intended to be considered in their entirety. The Environmental Response Team/Scientific, Engineering, Response and Analytical Services laboratory is not responsible for utilization of less than the complete report.

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Summary of Abbreviations

BFB	Bromofluorobenzene
C	Centigrade
CLP	Contract Laboratory Program
COC	Chain of Custody
conc	concentration
cont	continued
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
D	(Surrogate Table) value is from a diluted sample and was not calculated
Dioxin	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/MS	Gas Chromatography/ Mass Spectrometry
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MS (BS)	Matrix Spike (Blank Spike)
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
NS	Not Spiked
% D	Percent Difference
% REC	Percent Recovery
SOP	Standard Operating Procedure
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
PQL	Practical Quantitation Limit
PAL	Performance Acceptance Limit
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
SERAS	Scientific, Engineering, Response and Analytical Services
SIM	Selected Ion Monitoring
Sur	Surrogate
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m ³	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	s	sigma

Data Validation Flags

J	Value is estimated	R	Value is unusable
J+	Value is estimated high (metals only)	U	Not detected
J-	Value is estimated low (metals only)	UJ	Not detected and RL is estimated
N	Presumptively present (Aroclors only)		

Rev. 1/14/09



Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Page 1 of 6

Method SERAS SOP#1814

SERAS Sample No.		R203001-24		R203001-25		R203001-26		R203001-27
Sample Number	3/5/2012	0-130-1004		0-130-1005		0-130-1044		0-130-1045
Sample Location	Method Blank	S2A-IA1		S2A-IA2		DEC-IA1		DEC-IA2
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	0.0775	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	0.388	0.0698	U	0.0698	U	0.0698

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-28	R203001-29	R203001-30	R203001-31	R203001-39			
Sample Number	0-130-1046	0-130-1049	0-130-1050	0-130-1054	0-130-1055			
Sample Location	DEC-AMB1	DEC-IA3	CRPDC-IA1	CRPDC-IA2	CRPDC-AMB1			
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	0.933	0.0698	0.614	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	U	0.0698	0.998	0.0698	0.715	0.0698
							1.18	0.0698

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-40	R203001-41	R203001-42	R203001-43	R203001-44			
Sample Number	0-130-1001	0-130-1002	0-130-1006	0-130-1007	0-130-1008			
Sample Location	S2A-SS2	S2A-SS3	S2B-SS1	S2B-SS2	S2B-SS3			
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	0.294	0.0698	7.38	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	48.9	0.0698	849	1.50	3.14	0.0698	2.65	0.0698
							3.92	0.0698

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Page 2 of 6

Method SERAS SOP#1814

SERAS Sample No.	8R203001-48	8R203001-49	8R203001-50	8R203001-51	8R203001-52
Sample Number	0-130-1003	0-130-1041	0-130-1042	0-130-1043	0-130-1047
Sample Location	S2A-SS4	DEC-SS3	DEC-SS4	DEC-SS5	DEC-SS1

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698	U	0.0698	0.0842	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
cis-1,2-Dichloroethene	U	0.0698								
1,2-Dichloroethane	U	0.0698								
Trichloroethene	0.907	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	147	1.50	0.337	0.0698	0.167	0.0698	U	0.0698	7.16	0.0698

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	8R203001-53	8R203001-54	8R203001-55	8R203001-56
Sample Number	0-130-1048	0-130-1051	0-130-1052	0-130-1053
Sample Location	DEC-SS2	CRPDC-SS3	CRPDC-SS1	CRPDC-SS2

Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	1.50	U	1.50	U	1.50
1,1-Dichloroethene	U	0.0698	U	1.50	U	1.50	U	1.50
trans-1,2-Dichloroethene	U	0.0698	U	1.50	U	1.50	U	1.50
1,1-Dichloroethane	U	0.0698	U	1.50	U	1.50	U	1.50
cis-1,2-Dichloroethene	U	0.0698	U	1.50	U	1.50	U	1.50
1,2-Dichloroethane	U	0.0698	U	1.50	U	1.50	U	1.50
Trichloroethene	0.309	0.0698	10.6	1.50	29.0	1.50	17.6	1.50
Tetrachloroethene	27.5	0.0698	36700	113	102000	225	15400	113

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Page 3 of 6

Method SERAS SOP#1814

SERAS Sample No.	8R203001-57			
Sample Number	3/5/2012		0-130-1057	
Sample Location	Method Blank		Trip Blank	
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Propylene	U	0.0698	U	0.0698
Dichlorodifluoromethane	U	0.0698	U	0.0698
Chloromethane	U	0.0698	U	0.0698
Dichlortetrafluoroethane	U	0.0698	U	0.0698
Vinyl Chloride	U	0.0698	U	0.0698
1,3-Butadiene	U	0.0698	U	0.0698
Bromomethane	U	0.0698	U	0.0698
Chloroethane	U	0.0698	U	0.0698
Acetone	0.0997	0.233	0.364	0.233
Trichlorofluoromethane	U	0.0698	U	0.0698
Isopropyl Alcohol	U	1.165	U	1.165
1,1-Dichloroethene	U	0.0698	U	0.0698
Methylene Chloride	U	0.0698	U	0.0698
Trichlorotrifluoroethane	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698
MTBE	U	0.0698	U	0.0698
Vinyl Acetate	U	0.0698	U	0.0698
2-Butanone	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698
Ethyl Acetate	U	0.0698	U	0.0698
Hexane	U	0.0698	U	0.0698
Chloroform	U	0.0698	U	0.0698
Tetrahydrofuran	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698
1,1,1-Trichloroethane	U	0.0698	U	0.0698
Benzene	U	0.0698	U	0.0698
Carbon Tetrachloride	U	0.0698	U	0.0698
Cyclohexane	U	0.0698	U	0.0698
1,2-Dichloropropane	U	0.0698	U	0.0698
1,4-Dioxane	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698
Heptane	U	0.0698	U	0.0698
cis-1,3-Dichloropropene	U	0.0698	U	0.0698
Methyl Isobutyl Ketone	U	0.0698	U	0.0698
trans-1,3-Dichloropropene	U	0.0698	U	0.0698
1,1,2-Trichloroethane	U	0.0698	U	0.0698
Toluene	U	0.0698	U	0.0698
2-Hexanone	U	0.0698	U	0.0698
Dibromochloromethane	U	0.0698	U	0.0698
1,2-Dibromoethane	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	U	0.0698
Chlorobenzene	U	0.0698	U	0.0698
Ethylbenzene	U	0.0698	U	0.0698
m&p-Xylene	U	0.0698	U	0.0698
Bromoform	U	0.0698	U	0.0698
Styrene	U	0.0698	U	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698	U	0.0698
o-Xylene	U	0.0698	U	0.0698
p-Ethyltoluene	U	0.0698	U	0.0698
1,3,5-Trimethylbenzene	U	0.0698	U	0.0698
1,2,4-Trimethylbenzene	U	0.0698	U	0.0698
1,3-Dichlorobenzene	U	0.0698	U	0.0698
1,4-Dichlorobenzene	U	0.0698	U	0.0698
1,2-Dichlorobenzene	U	0.0698	U	0.0698

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

Analyte	SERAS Sample No.		8R203001-32		8R203001-33		8R203001-34		8R203001-35	
	Sample Number	3/6/2012	0-130-1012		0-130-1013		0-130-1018		0-130-1019	
			Method Blank		EQP-SS1		EQP-SS2		EQP-SS3	
Results	ppbv	RL	Results	RL	Results	RL	Results	RL	Results	RL
Propylene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Dichlorodifluoromethane	U	0.0698	0.338	0.0698	0.351	0.0698	0.384	0.0698	0.498	0.0698
Chloromethane	U	0.0698	0.145	0.0698	0.115	0.0698	0.135	0.0698	0.135	0.0698
Dichlortetrafluoroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,3-Butadiene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Bromomethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Chloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Acetone	U	0.233	U	2.60	4.65	0.233	13.4	0.233	6.94	0.233
Trichlorofluoromethane	U	0.0698	0.204	0.0698	0.464	0.0698	0.351	0.0698	1.83	0.0698
Isopropyl Alcohol	U	1.16	0.760	1.16	1.08	1.16	0.816	1.16	17.8	J 1.16
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.156	0.0698
Methylene Chloride	U	0.0698	0.190	0.0698	0.603	0.0698	0.262	0.0698	U	0.0698
Trichlorotrifluoroethane	U	0.0698	0.0759	0.0698	U	0.0698	0.0706	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	0.253	0.0698	0.0732	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
MTBE	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Vinyl Acetate	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
2-Butanone	U	0.0698	0.814	0.0698	1.51	0.0698	1.40	0.0698	0.707	0.0698
cis-1,2-Dichloroethene	U	0.0698	0.0757	0.0698	U	0.0698	0.0984	0.0698	4.50	0.0698
Ethyl Acetate	U	0.0698	0.430	0.0698	0.524	0.0698	0.529	0.0698	0.353	0.0698
Hexane	U	0.0698	0.0919	0.0698	0.219	0.0698	0.424	0.0698	0.216	0.0698
Chloroform	U	0.0698	0.446	0.0698	0.146	0.0698	1.78	0.0698	U	0.0698
Tetrahydrofuran	U	0.0698	0.113	0.0698	0.172	0.0698	U	0.0698	0.199	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1,1-Trichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.197	0.0698
Benzene	U	0.0698	0.0930	0.0698	U	0.0698	0.190	0.0698	U	0.0698
Carbon Tetrachloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Cyclohexane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloropropane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,4-Dioxane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	19.5	0.0698	0.0893	0.0698	0.0843	0.0698	1.7	0.0698
Heptane	U	0.0698	U	0.0698	U	0.0698	0.0845	0.0698	U	0.0698
cis-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Methyl Isobutyl Ketone	U	0.0698	0.336	0.0698	0.082	0.0698	0.543	0.0698	0.791	0.0698
trans-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1,2-Trichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Toluene	U	0.0698	0.858	0.0698	0.854	0.0698	1.07	0.0698	0.478	0.0698
2-Hexanone	U	0.0698	U	0.0698	0.08	0.0698	0.0804	0.0698	U	0.0698
Dibromochloromethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dibromoethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	1080	1.50	319	1.50	265	1.50	383	1.50
Chlorobenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Ethylbenzene	U	0.0698	U	0.0698	U	0.0698	0.106	0.0698	U	0.0698
m&p-Xylene	U	0.0698	U	0.0698	0.121	0.0698	0.274	0.0698	U	0.0698
Bromoform	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Styrene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1,2-Tetrachloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
o-Xylene	U	0.0698	U	0.0698	0.128	0.0698	0.283	0.0698	U	0.0698
p-Ethyltoluene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,3,5-Trimethylbenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2,4-Trimethylbenzene	U	0.0698	U	0.0698	0.089	0.0698	0.183	0.0698	U	0.0698
1,3-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,4-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698	0.0811	0.0698	U	0.0698
1,2-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-36		8R203001-37		8R203001-38		8R203001-45		8R203001-46	
Sample Number	0-130-1020		0-130-1021		0-130-1022		0-130-1033		0-130-1037	
Sample Location	EQP-SS5		EQP-SS6		EQP-SS7		EQP-SS8		EQP-SS9	
Analyte	Results ppbv	RL ppbv								
Propylene	U	0.0698								
Dichlorodifluoromethane	0.479	0.0698	0.369	0.0698	0.348	0.0698	0.221	0.0698	0.406	0.0698
Chloromethane	0.114	0.0698	U	0.0698	0.251	0.0698	U	0.0698	0.661	0.0698
Dichlortetrafluoroethane	U	0.0698								
Vinyl Chloride	U	0.0698								
1,3-Butadiene	U	0.0698								
Bromomethane	U	0.0698								
Chloroethane	U	0.0698								
Acetone	8.46	0.233	U	3.63	8.44	0.233	4.92	0.233	6080	1000
Trichlorofluoromethane	1.42	0.0698	0.554	0.0698	0.240	0.0698	0.205	0.0698	0.240	0.0698
Isopropyl Alcohol	3.45	J 2.20	0.371	1.16	0.827	1.16	U	1.16	U	1.16
1,1-Dichloroethene	U	0.0698								
Methylene Chloride	0.188	0.0698	U	0.0698	U	0.0698	1.50	0.0698	29.6	0.0698
Trichlorotrifluoroethane	0.0784	0.0698	0.0725	0.0698	0.0756	0.0698	0.0734	0.0698	0.0749	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	3.41	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698								
MTBE	U	0.0698								
Vinyl Acetate	U	0.0698								
2-Butanone	1.47	0.0698	0.873	0.0698	1.43	0.0698	0.941	0.0698	11.0	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	94.5	1.50	U	0.0698
Ethyl Acetate	0.628	0.0698	0.508	0.0698	0.487	0.0698	0.546	0.0698	U	0.0698
Hexane	0.343	0.0698	0.371	0.0698	0.257	0.0698	0.388	0.0698	11.9	0.0698
Chloroform	0.0916	0.0698	0.104	0.0698	0.160	0.0698	3.97	0.0698	0.334	0.0698
Tetrahydrofuran	0.192	0.0698	0.464	0.0698	0.252	0.0698	0.308	0.0698	16.8	0.0698
1,2-Dichloroethane	U	0.0698								
1,1,1-Trichloroethane	U	0.0698	U	0.0698	U	0.0698	0.117	0.0698	U	0.0698
Benzene	0.119	0.0698	U	0.0698	U	0.0698	1.04	0.0698	0.392	0.0698
Carbon Tetrachloride	U	0.0698								
Cyclohexane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.324	0.0698
1,2-Dichloropropane	U	0.0698								
1,4-Dioxane	U	0.0698								
Trichloroethene	U	0.0698	0.157	0.0698	1.75	0.0698	627	1.50	0.122	0.0698
Heptane	U	0.0698								
cis-1,3-Dichloropropene	U	0.0698								
Methyl Isobutyl Ketone	0.176	0.0698	0.259	0.0698	0.509	0.0698	1.29	0.0698	5.27	0.0698
trans-1,3-Dichloropropene	U	0.0698								
1,1,2-Trichloroethane	U	0.0698								
Toluene	1.31	0.0698	0.643	0.0698	0.617	0.0698	0.865	0.0698	228	1.50
2-Hexanone	0.133	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Dibromochloromethane	U	0.0698								
1,2-Dibromoethane	U	0.0698								
Tetrachloroethene	110	1.50	841	1.50	539	1.50	111000	300	82.8	1.50
Chlorobenzene	U	0.0698								
Ethylbenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.897	0.0698
m&p-Xylene	0.206	0.0698	0.102	0.0698	U	0.0698	0.116	0.0698	3.82	0.0698
Bromoform	U	0.0698								
Styrene	U	0.0698	0.0912	0.0698	U	0.0698	U	0.0698	0.123	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698								
o-Xylene	0.134	0.0698	0.0867	0.0698	U	0.0698	U	0.0698	2.28	0.0698
p-Ethyltoluene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	12.6	0.0698
1,3,5-Trimethylbenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	9.70	0.0698
1,2,4-Trimethylbenzene	0.0988	0.0698	U	0.0698	U	0.0698	0.122	0.0698	26.5	0.0698
1,3-Dichlorobenzene	U	0.0698								
1,4-Dichlorobenzene	U	0.0698								
1,2-Dichlorobenzene	U	0.0698								

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No. 8R203001-47
 Sample Number 0-130-1039
 Sample Location EQP-SS10

Analyte	Results ppbv	RL ppbv
Propylene	U	0.0698
Dichlorodifluoromethane	0.358	0.0698
Chloromethane	0.673	0.0698
Dichlortetrafluoroethane	U	0.0698
Vinyl Chloride	U	0.0698
1,3-Butadiene	U	0.0698
Bromomethane	U	0.0698
Chloroethane	U	0.0698
Acetone	461	5.00
Trichlorofluoromethane	0.208	0.0698
Isopropyl Alcohol	5.94 J	2.87
1,1-Dichloroethene	U	0.0698
Methylene Chloride	4.85	0.0698
Trichlorotrifluoroethane	0.0791	0.0698
trans-1,2-Dichloroethene	U	0.0698
1,1-Dichloroethane	U	0.0698
MTBE	U	0.0698
Vinyl Acetate	U	0.0698
2-Butanone	15.6	0.0698
cis-1,2-Dichloroethene	U	0.0698
Ethyl Acetate	5.19	0.0698
Hexane	9.05	0.0698
Chloroform	1.80	0.0698
Tetrahydrofuran	1.90	0.0698
1,2-Dichloroethane	0.257	0.0698
1,1,1-Trichloroethane	U	0.0698
Benzene	4.69	0.0698
Carbon Tetrachloride	0.147	0.0698
Cyclohexane	1.91	0.0698
1,2-Dichloropropane	0.229	0.0698
1,4-Dioxane	U	0.0698
Trichloroethene	U	0.0698
Heptane	4.31	0.0698
cis-1,3-Dichloropropene	U	0.0698
Methyl Isobutyl Ketone	U	0.0698
trans-1,3-Dichloropropene	U	0.0698
1,1,2-Trichloroethane	U	0.0698
Toluene	34700	300
2-Hexanone	U	0.0698
Dibromochloromethane	U	0.0698
1,2-Dibromoethane	U	0.0698
Tetrachloroethene	4.92	0.0698
Chlorobenzene	U	0.0698
Ethylbenzene	12.5	0.0698
m&p-Xylene	30.6	0.0698
Bromoform	U	0.0698
Styrene	0.589	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698
o-Xylene	6.89	0.0698
p-Ethyltoluene	2.44	0.0698
1,3,5-Trimethylbenzene	1.79	0.0698
1,2,4-Trimethylbenzene	5.65	0.0698
1,3-Dichlorobenzene	U	0.0698
1,4-Dichlorobenzene	0.257	0.0698
1,2-Dichlorobenzene	U	0.0698

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Page 1 of 6

Method SERAS SOP#1814

SERAS Sample No.	R203001-24	R203001-25	R203001-26	R203001-27						
Sample Number	0-130-1004	0-130-1005	0-130-1044	0-130-1045						
Sample Location	Method Blank	S2A-IA1	S2A-IA2	DEC-IA1						
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277	U	0.277	0.307	0.277	U	0.277	U	0.277
1,2-Dichloroethane	U	0.282								
Trichloroethene	U	0.375								
Tetrachloroethene	U	0.473	2.63	0.473	U	0.473	U	0.473	U	0.473

Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-28	R203001-29	R203001-30	R203001-31	R203001-39					
Sample Number	0-130-1046	0-130-1049	0-130-1050	0-130-1054	0-130-1055					
Sample Location	DEC-AMB1	DEC-IA3	CRPDC-IA1	CRPDC-IA2	CRPDC-AMB1					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282	3.78	0.282	2.48	0.282	U	0.282	U	0.282
Trichloroethene	U	0.375								
Tetrachloroethene	U	0.473	U	0.473	6.77	0.473	4.85	0.473	7.99	0.473

Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-40	R203001-41	R203001-42	R203001-43	R203001-44					
Sample Number	0-130-1001	0-130-1002	0-130-1006	0-130-1007	0-130-1008					
Sample Location	S2A-SS2	S2A-SS3	S2B-SS1	S2B-SS2	S2B-SS3					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282								
Trichloroethene	1.58	0.375	39.7	0.375	U	0.375	U	0.375	U	0.375
Tetrachloroethene	332	0.473	5760	10.2	21.3	0.473	18.0	0.473	26.6	0.473

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-48	8R203001-49	8R203001-50	8R203001-51	8R203001-52
Sample Number	0-130-1003	0-130-1041	0-130-1042	0-130-1043	0-130-1047
Sample Location	S2A-SS4	DEC-SS3	DEC-SS4	DEC-SS5	DEC-SS1

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277	U	0.277	0.334	0.277	U	0.277	U	0.277
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282								
Trichloroethene	4.88	0.375	U	0.375	U	0.375	U	0.375	U	0.375
Tetrachloroethene	998	10.2	2.29	0.473	1.13	0.473	U	0.473	48.6	0.473

Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	8R203001-53	8R203001-54	8R203001-55	8R203001-56
Sample Number	0-130-1048	0-130-1051	0-130-1052	0-130-1053
Sample Location	DEC-SS2	CRPDC-SS3	CRPDC-SS1	CRPDC-SS2

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	3.83	U	3.83	U	3.83
1,1-Dichloroethene	U	0.277	U	5.95	U	5.95	U	5.95
trans-1,2-Dichloroethene	U	0.277	U	5.95	U	5.95	U	5.95
1,1-Dichloroethane	U	0.282	U	6.07	U	6.07	U	6.07
cis-1,2-Dichloroethene	U	0.277	U	5.95	U	5.95	U	5.95
1,2-Dichloroethane	U	0.282	U	6.07	U	6.07	U	6.07
Trichloroethene	1.66	0.375	57.1	8.06	156	8.06	94.6	8.06
Tetrachloroethene	187	0.473	249000	766	692000	1530	104000	766

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.			8R203001-57
Sample Number	3/5/2012		0-130-1057
Sample Location	Method Blank		Trip Blank
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Propylene	U	0.120	U
Dichlorodifluoromethane	U	0.345	U
Chloromethane	U	0.144	U
Dichlorotetrafluoroethane	U	0.488	U
Vinyl Chloride	U	0.178	U
1,3-Butadiene	U	0.154	U
Bromomethane	U	0.271	U
Chloroethane	U	0.184	U
Acetone	0.237	0.552	0.864
Trichlorofluoromethane	U	0.392	U
Isopropyl Alcohol	U	2.860	U
1,1-Dichloroethene	U	0.277	U
Methylene Chloride	U	0.242	U
Trichlorotrifluoroethane	U	0.535	U
trans-1,2-Dichloroethene	U	0.277	U
1,1-Dichloroethane	U	0.282	U
MTBE	U	0.252	U
Vinyl Acetate	U	0.246	U
2-Butanone	U	0.206	U
cis-1,2-Dichloroethene	U	0.277	U
Ethyl Acetate	U	0.251	U
Hexane	U	0.246	U
Chloroform	U	0.341	U
Tetrahydrofuran	U	0.206	U
1,2-Dichloroethane	U	0.282	U
1,1,1-Trichloroethane	U	0.381	U
Benzene	U	0.223	U
Carbon Tetrachloride	U	0.439	U
Cyclohexane	U	0.240	U
1,2-Dichloropropane	U	0.322	U
1,4-Dioxane	U	0.251	U
Trichloroethene	U	0.375	U
Heptane	U	0.286	U
cis-1,3-Dichloropropene	U	0.317	U
Methyl Isobutyl Ketone	U	0.286	U
trans-1,3-Dichloropropene	U	0.317	U
1,1,2-Trichloroethane	U	0.381	U
Toluene	U	0.263	U
2-Hexanone	U	0.286	U
Dibromochloromethane	U	0.594	U
1,2-Dibromoethane	U	0.536	U
Tetrachloroethene	U	0.473	U
Chlorobenzene	U	0.321	U
Ethylbenzene	U	0.303	U
m&p-Xylene	U	0.303	U
Bromoform	U	0.721	U
Styrene	U	0.297	U
1,1,2,2-Tetrachloroethane	U	0.479	U
o-Xylene	U	0.303	U
p-Ethyltoluene	U	0.343	U
1,3,5-Trimethylbenzene	U	0.343	U
1,2,4-Trimethylbenzene	U	0.343	U
1,3-Dichlorobenzene	U	0.419	U
1,4-Dichlorobenzene	U	0.419	U
1,2-Dichlorobenzene	U	0.419	U

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	3/6/2012		8R203001-32		8R203001-33		8R203001-34		8R203001-35	
Sample Number	Method Blank		0-130-1012		0-130-1013		0-130-1018		0-130-1019	
Sample Location			EQP-SS1		EQP-SS2		EQP-SS3		EQP-SS4	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Propylene	U	0.120								
Dichlorodifluoromethane	U	0.345	1.67	0.345	1.73	0.345	1.90	0.345	2.46	0.345
Chloromethane	U	0.144	0.300	0.144	0.238	0.144	0.279	0.144	0.279	0.144
Dichlorotetrafluoroethane	U	0.488								
Vinyl Chloride	U	0.178								
1,3-Butadiene	U	0.154								
Bromomethane	U	0.271								
Chloroethane	U	0.184								
Acetone	U	0.552	U	6.170	11.1	0.552	31.9	0.552	16.5	0.552
Trichlorofluoromethane	U	0.392	1.14	0.392	2.61	0.392	1.97	0.392	10.3	0.392
Isopropyl Alcohol	U	2.86	1.87	2.86	2.65	0.572	2.00	0.572	43.6	J 0.572
1,1-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277	0.618	0.277
Methylene Chloride	U	0.242	0.660	0.242	2.10	0.242	0.911	0.242	U	0.242
Trichlorotrifluoroethane	U	0.535	0.582	0.535	U	0.535	0.541	0.535	U	0.535
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	1.00	0.277	0.290	0.277
1,1-Dichloroethane	U	0.282								
MTBE	U	0.252								
Vinyl Acetate	U	0.246								
2-Butanone	U	0.206	2.40	0.206	4.44	0.206	4.12	0.206	2.09	0.206
cis-1,2-Dichloroethene	U	0.277	0.300	0.277	U	0.277	0.390	0.277	17.8	0.277
Ethyl Acetate	U	0.251	1.55	0.251	1.89	0.251	1.91	0.251	1.27	0.251
Hexane	U	0.246	0.324	0.246	0.770	0.246	1.50	0.246	0.763	0.246
Chloroform	U	0.341	2.18	0.341	0.711	0.341	8.69	0.341	U	0.341
Tetrahydrofuran	U	0.206	0.333	0.206	0.506	0.206	U	0.206	0.588	0.206
1,2-Dichloroethane	U	0.282								
1,1,1-Trichloroethane	U	0.381	U	0.381	U	0.381	U	0.381	1.07	0.381
Benzene	U	0.223	0.297	0.223	U	0.223	0.607	0.223	U	0.223
Carbon Tetrachloride	U	0.439								
Cyclohexane	U	0.240								
1,2-Dichloropropane	U	0.322								
1,4-Dioxane	U	0.251								
Trichloroethene	U	0.375	105	0.375	0.480	0.375	0.453	0.375	9.13	0.375
Heptane	U	0.286								
cis-1,3-Dichloropropene	U	0.317								
Methyl Isobutyl Ketone	U	0.286	1.38	0.286	0.335	0.286	2.23	0.286	3.24	0.286
trans-1,3-Dichloropropene	U	0.317								
1,1,2-Trichloroethane	U	0.381								
Toluene	U	0.263	3.23	0.263	3.22	0.263	4.04	0.263	1.80	0.263
2-Hexanone	U	0.286	U	0.286	0.328	0.286	0.329	0.286	U	0.286
Dibromochloromethane	U	0.594								
1,2-Dibromoethane	U	0.536								
Tetrachloroethene	U	0.473	7340	10.2	2170	10.2	1790	10.2	2600	10.2
Chlorobenzene	U	0.321								
Ethylbenzene	U	0.303	U	0.303	U	0.303	0.461	0.303	U	0.303
m&p-Xylene	U	0.303	U	0.303	0.528	0.303	1.19	0.303	U	0.303
Bromoform	U	0.721								
Styrene	U	0.297								
1,1,2,2-Tetrachloroethane	U	0.479								
o-Xylene	U	0.303	U	0.303	0.556	0.303	1.23	0.303	U	0.303
p-Ethyltoluene	U	0.343								
1,3,5-Trimethylbenzene	U	0.343								
1,2,4-Trimethylbenzene	U	0.343	U	0.343	0.437	0.343	0.899	0.343	U	0.343
1,3-Dichlorobenzene	U	0.419								
1,4-Dichlorobenzene	U	0.419	U	0.419	U	0.419	0.488	0.419	U	0.419
1,2-Dichlorobenzene	U	0.419								

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-36	8R203001-37	8R203001-38	8R203001-45	8R203001-46
Sample Number	0-130-1020	0-130-1021	0-130-1022	0-130-1033	0-130-1037
Sample Location	EQP-SS5	EQP-SS6	EQP-SS7	EQP-SS8	EQP-SS9
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Propylene	U	0.120	U	0.120	U
Dichlorodifluoromethane	2.37	0.345	1.82	0.345	1.09
Chloromethane	0.235	0.144	U	0.144	U
Dichlorotetrafluoroethane	U	0.488	U	0.488	U
Vinyl Chloride	U	0.178	U	0.178	U
1,3-Butadiene	U	0.154	U	0.154	U
Bromomethane	U	0.271	U	0.271	U
Chloroethane	U	0.184	U	0.184	U
Acetone	20.1	0.552	U	8.63	20.1
Trichlorofluoromethane	7.97	0.392	3.11	0.392	1.15
Isopropyl Alcohol	8.48	J 5.41	0.911	2.86	2.03
1,1-Dichloroethene	U	0.277	U	0.277	U
Methylene Chloride	0.653	0.242	U	0.242	U
Trichlorotrifluoroethane	0.601	0.535	0.555	0.535	0.579
trans-1,2-Dichloroethene	U	0.277	U	0.277	U
1,1-Dichloroethane	U	0.282	U	0.282	U
MTBE	U	0.252	U	0.252	U
Vinyl Acetate	U	0.246	U	0.246	U
2-Butanone	4.33	0.206	2.57	0.206	4.23
cis-1,2-Dichloroethene	U	0.277	U	0.277	U
Ethyl Acetate	2.26	0.251	1.83	0.251	1.76
Hexane	1.21	0.246	1.31	0.246	0.905
Chloroform	0.447	0.341	0.508	0.341	0.780
Tetrahydrofuran	0.566	0.206	1.37	0.206	0.743
1,2-Dichloroethane	U	0.282	U	0.282	U
1,1,1-Trichloroethane	U	0.381	U	0.381	U
Benzene	0.379	0.223	U	0.223	U
Carbon Tetrachloride	U	0.439	U	0.439	U
Cyclohexane	U	0.240	U	0.240	U
1,2-Dichloropropane	U	0.322	U	0.322	U
1,4-Dioxane	U	0.251	U	0.251	U
Trichloroethene	U	0.375	0.843	0.375	9.41
Heptane	U	0.286	U	0.286	0.375
cis-1,3-Dichloropropene	U	0.317	U	0.317	U
Methyl Isobutyl Ketone	0.721	0.286	1.06	0.286	2.08
trans-1,3-Dichloropropene	U	0.317	U	0.317	U
1,1,2-Trichloroethane	U	0.381	U	0.381	U
Toluene	4.93	0.263	2.42	0.263	2.33
2-Hexanone	0.546	0.286	U	0.286	0.263
Dibromochloromethane	U	0.594	U	0.594	U
1,2-Dibromoethane	U	0.536	U	0.536	U
Tetrachloroethene	748	10.2	5710	10.2	3650
Chlorobenzene	U	0.321	U	0.321	10.2
Ethylbenzene	U	0.303	U	0.303	0.286
m&p-Xylene	0.896	0.303	0.443	0.303	U
Bromoform	U	0.721	U	0.721	0.303
Styrene	U	0.297	0.389	0.297	U
1,1,2,2-Tetrachloroethane	U	0.479	U	0.479	0.297
o-Xylene	0.581	0.303	0.376	0.303	U
p-Ethyltoluene	U	0.343	U	0.343	0.297
1,3,5-Trimethylbenzene	U	0.343	U	0.343	U
1,2,4-Trimethylbenzene	0.486	0.343	U	0.343	0.479
1,3-Dichlorobenzene	U	0.419	U	0.419	0.479
1,4-Dichlorobenzene	U	0.419	U	0.419	0.419
1,2-Dichlorobenzene	U	0.419	U	0.419	U

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-47
Sample Number	0-130-1039
Sample Location	EQP-SS10

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Propylene	U	0.120
Dichlorodifluoromethane	1.77	0.345
Chloromethane	1.39	0.144
Dichlorotetrafluoroethane	U	0.488
Vinyl Chloride	U	0.178
1,3-Butadiene	U	0.154
Bromomethane	U	0.271
Chloroethane	U	0.184
Acetone	1100	11.9
Trichlorofluoromethane	1.17	0.392
Isopropyl Alcohol	14.6 J	7.05
1,1-Dichloroethene	U	0.277
Methylene Chloride	16.9	0.242
Trichlorotrifluoroethane	0.606	0.535
trans-1,2-Dichloroethene	U	0.277
1,1-Dichloroethane	U	0.282
MTBE	U	0.252
Vinyl Acetate	U	0.246
2-Butanone	46.0	0.206
cis-1,2-Dichloroethene	U	0.277
Ethyl Acetate	18.7	0.251
Hexane	31.9	0.246
Chloroform	8.78	0.341
Tetrahydrofuran	5.59	0.206
1,2-Dichloroethane	1.04	0.282
1,1,1-Trichloroethane	U	0.381
Benzene	15.0	0.223
Carbon Tetrachloride	0.924	0.439
Cyclohexane	6.58	0.240
1,2-Dichloropropane	1.06	0.322
1,4-Dioxane	U	0.251
Trichloroethene	U	0.375
Heptane	17.7	0.286
cis-1,3-Dichloropropene	U	0.317
Methyl Isobutyl Ketone	U	0.286
trans-1,3-Dichloropropene	U	0.317
1,1,2-Trichloroethane	U	0.381
Toluene	131000	1130
2-Hexanone	U	0.286
Dibromochloromethane	U	0.594
1,2-Dibromoethane	U	0.536
Tetrachloroethene	33.4	0.473
Chlorobenzene	U	0.321
Ethylbenzene	54.2	0.303
m&p-Xylene	133	0.303
Bromoform	U	0.721
Styrene	2.51	0.297
1,1,2,2-Tetrachloroethane	U	0.479
o-Xylene	29.9	0.303
p-Ethyltoluene	12.0	0.343
1,3,5-Trimethylbenzene	8.79	0.343
1,2,4-Trimethylbenzene	27.8	0.343
1,3-Dichlorobenzene	U	0.419
1,4-Dichlorobenzene	1.55	0.419
1,2-Dichlorobenzene	U	0.419

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Table 2.1 Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

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Sample ID: LCS 03/05/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.872	84.7	31 - 133
Dichlorodifluoromethane	1.05	0.798	76.0	58 - 140
Chloromethane	1.03	0.838	81.4	52 - 134
Dichlorotetrafluoroethane	1.03	0.891	86.5	54 - 136
Vinyl Chloride	1.03	0.822	79.8	53 - 130
1,3-Butadiene	1.04	0.712	68.5	33 - 130
Bromomethane	1.05	0.891	84.9	41 - 140
Chloroethane	1.05	0.800	76.2	44 - 139
Acetone	0.997	0.777	77.9	35 - 151
Trichlorofluoromethane	1.06	0.910	85.8	50 - 148
Isopropyl Alcohol	1.07	0.543	50.7	19 - 166
1,1-Dichloroethene	1.05	0.835	79.5	49 - 128
Methylene Chloride	1.05	0.826	78.7	35 - 134
Trichlorotrifluoroethane	1.05	1.07	102	40 - 160
trans-1,2-Dichloroethene	1.05	0.821	78.2	62 - 123
1,1-Dichloroethane	1.05	0.871	83.0	64 - 133
MTBE	1.05	0.847	80.7	56 - 130
Vinyl Acetate	1.06	0.735	69.3	65 - 117
2-Butanone	1.03	0.877	85.1	38 - 157
cis-1,2-Dichloroethene	1.05	0.864	82.3	61 - 129
Ethyl Acetate	1.02	0.868	85.1	54 - 158
Hexane	1.04	0.850	81.7	67 - 121
Chloroform	1.02	0.922	90.4	62 - 141
Tetrahydrofuran	1.06	0.742	70.0	46 - 119
1,2-Dichloroethane	1.05	0.885	84.3	59 - 139
1,1,1-Trichloroethane	1.05	0.775	73.8	53 - 160
Benzene	1.05	0.713	67.9	62 - 123
Carbon Tetrachloride	1.04	0.816	78.5	56 - 159
Cyclohexane	1.05	0.778	74.1	59 - 133
1,2-Dichloropropane	1.05	0.750	71.4	51 - 149
1,4-Dioxane	1.04	0.695	66.8	10 - 170
Trichloroethene	1.04	0.868	83.5	72 - 133
Heptane	1.03	0.747	72.5	35 - 172
cis-1,3-Dichloropropene	1.08	0.806	74.6	66 - 156
Methyl Isobutyl Ketone	1.02	0.692	67.8	10 - 200
trans-1,3-Dichloropropene	1.06	0.737	69.5	52 - 158
1,1,2-Trichloroethane	1.03	0.834	81.0	62 - 143
Toluene	1.05	0.791	75.3	64 - 133
2-Hexanone	1.07	0.657	61.4	10 - 200
Dibromochloromethane	1.06	0.872	82.3	64 - 151
1,2-Dibromoethane	1.04	0.832	80.0	65 - 143
Tetrachloroethene	1.04	0.865	83.2	66 - 138
Chlorobenzene	1.06	0.831	78.4	62 - 134
Ethylbenzene	1.06	0.826	77.9	61 - 139
m&p-Xylene	2.07	1.56	75.4	14 - 175
Bromoform	1.03	0.887	86.1	68 - 142
Styrene	1.05	0.827	78.8	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.742	73.5	43 - 156
o-Xylene	1.06	0.832	78.5	53 - 150
p-Ethyltoluene	1.06	0.871	82.2	59 - 129
1,3,5-Trimethylbenzene	1.06	0.831	78.4	39 - 125
1,2,4-Trimethylbenzene	1.04	0.847	81.4	24 - 131
1,3-Dichlorobenzene	1.03	0.924	89.7	57 - 124
1,4-Dichlorobenzene	1.03	0.920	89.3	56 - 128
1,2-Dichlorobenzene	1.05	0.926	88.2	46 - 117

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

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Sample ID: LCS 03/06/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.882	85.6	31 - 133
Dichlorodifluoromethane	1.05	0.815	77.6	58 - 140
Chloromethane	1.03	0.851	82.6	52 - 134
Dichlorotetrafluoroethane	1.03	0.912	88.5	54 - 136
Vinyl Chloride	1.03	0.860	83.5	53 - 130
1,3-Butadiene	1.04	0.738	71.0	33 - 130
Bromomethane	1.05	0.951	90.6	41 - 140
Chloroethane	1.05	0.836	79.6	44 - 139
Acetone	0.997	0.780	78.2	35 - 151
Trichlorofluoromethane	1.06	0.956	90.2	50 - 148
Isopropyl Alcohol	1.07	0.558	52.1	19 - 166
1,1-Dichloroethene	1.05	0.841	80.1	49 - 128
Methylene Chloride	1.05	0.862	82.1	35 - 134
Trichlorotrifluoroethane	1.05	1.10	105	40 - 160
trans-1,2-Dichloroethene	1.05	0.832	79.2	62 - 123
1,1-Dichloroethane	1.05	0.890	84.8	64 - 133
MTBE	1.05	0.841	80.1	56 - 130
Vinyl Acetate	1.06	0.765	72.2	65 - 117
2-Butanone	1.03	0.873	84.8	38 - 157
cis-1,2-Dichloroethene	1.05	0.876	83.4	61 - 129
Ethyl Acetate	1.02	0.888	87.1	54 - 158
Hexane	1.04	0.862	82.9	67 - 121
Chloroform	1.02	0.954	93.5	62 - 141
Tetrahydrofuran	1.06	0.755	71.2	46 - 119
1,2-Dichloroethane	1.05	0.927	88.3	59 - 139
1,1,1-Trichloroethane	1.05	0.819	78.0	53 - 160
Benzene	1.05	0.729	69.4	62 - 123
Carbon Tetrachloride	1.04	0.870	83.7	56 - 159
Cyclohexane	1.05	0.801	76.3	59 - 133
1,2-Dichloropropane	1.05	0.775	73.8	51 - 149
1,4-Dioxane	1.04	0.717	68.9	10 - 170
Trichloroethene	1.04	0.901	86.6	72 - 133
Heptane	1.03	0.780	75.7	35 - 172
cis-1,3-Dichloropropene	1.08	0.822	76.1	66 - 156
Methyl Isobutyl Ketone	1.02	0.707	69.3	10 - 200
trans-1,3-Dichloropropene	1.06	0.765	72.2	52 - 158
1,1,2-Trichloroethane	1.03	0.881	85.5	62 - 143
Toluene	1.05	0.819	78.0	64 - 133
2-Hexanone	1.07	0.700	65.4	10 - 200
Dibromochloromethane	1.06	0.940	88.7	64 - 151
1,2-Dibromoethane	1.04	0.879	84.5	65 - 143
Tetrachloroethene	1.04	0.942	90.6	66 - 138
Chlorobenzene	1.06	0.889	83.9	62 - 134
Ethylbenzene	1.06	0.865	81.6	61 - 139
m&p-Xylene	2.07	1.67	80.7	14 - 175
Bromoform	1.03	0.950	92.2	68 - 142
Styrene	1.05	0.872	83.0	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.800	79.2	43 - 156
o-Xylene	1.06	0.889	83.9	53 - 150
p-Ethyltoluene	1.06	0.922	87.0	59 - 129
1,3,5-Trimethylbenzene	1.06	0.897	84.6	39 - 125
1,2,4-Trimethylbenzene	1.04	0.903	86.8	24 - 131
1,3-Dichlorobenzene	1.03	0.995	96.6	57 - 124
1,4-Dichlorobenzene	1.03	0.995	96.6	56 - 128
1,2-Dichlorobenzene	1.05	0.985	93.8	46 - 117

REPORT OF LABORATORY ANALYSIS

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 3 of 3

Sample ID: LCS 03/06/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.874	84.9	31 - 133
Dichlorodifluoromethane	1.05	0.779	74.2	58 - 140
Chloromethane	1.03	0.800	77.7	52 - 134
Dichlorotetrafluoroethane	1.03	0.876	85.0	54 - 136
Vinyl Chloride	1.03	0.818	79.4	53 - 130
1,3-Butadiene	1.04	0.717	68.9	33 - 130
Bromomethane	1.05	0.895	85.2	41 - 140
Chloroethane	1.05	0.780	74.3	44 - 139
Acetone	0.997	0.744	74.6	35 - 151
Trichlorofluoromethane	1.06	0.907	85.6	50 - 148
Isopropyl Alcohol	1.07	0.533	49.8	19 - 166
1,1-Dichloroethene	1.05	0.822	78.3	49 - 128
Methylene Chloride	1.05	0.800	76.2	35 - 134
Trichlorotrifluoroethane	1.05	1.04	99.0	40 - 160
trans-1,2-Dichloroethene	1.05	0.805	76.7	62 - 123
1,1-Dichloroethane	1.05	0.854	81.3	64 - 133
MTBE	1.05	0.835	79.5	56 - 130
Vinyl Acetate	1.06	0.720	67.9	65 - 117
2-Butanone	1.03	0.844	81.9	38 - 157
cis-1,2-Dichloroethene	1.05	0.839	79.9	61 - 129
Ethyl Acetate	1.02	0.852	83.5	54 - 158
Hexane	1.04	0.834	80.2	67 - 121
Chloroform	1.02	0.903	88.5	62 - 141
Tetrahydrofuran	1.06	0.724	68.3	46 - 119
1,2-Dichloroethane	1.05	0.888	84.6	59 - 139
1,1,1-Trichloroethane	1.05	0.804	76.6	53 - 160
Benzene	1.05	0.720	68.6	62 - 123
Carbon Tetrachloride	1.04	0.838	80.6	56 - 159
Cyclohexane	1.05	0.789	75.1	59 - 133
1,2-Dichloropropane	1.05	0.769	73.2	51 - 149
1,4-Dioxane	1.04	0.710	68.3	10 - 170
Trichloroethene	1.04	0.881	84.7	72 - 133
Heptane	1.03	0.746	72.4	35 - 172
cis-1,3-Dichloropropene	1.08	0.821	76.0	66 - 156
Methyl Isobutyl Ketone	1.02	0.695	68.1	10 - 200
trans-1,3-Dichloropropene	1.06	0.759	71.6	52 - 158
1,1,2-Trichloroethane	1.03	0.836	81.2	62 - 143
Toluene	1.05	0.803	76.5	64 - 133
2-Hexanone	1.07	0.672	62.8	10 - 200
Dibromochloromethane	1.06	0.898	84.7	64 - 151
1,2-Dibromoethane	1.04	0.844	81.2	65 - 143
Tetrachloroethene	1.04	0.899	86.4	66 - 138
Chlorobenzene	1.06	0.840	79.2	62 - 134
Ethylbenzene	1.06	0.838	79.1	61 - 139
m&p-Xylene	2.07	1.59	76.8	14 - 175
Bromoform	1.03	0.911	88.4	68 - 142
Styrene	1.05	0.836	79.6	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.759	75.1	43 - 156
o-Xylene	1.06	0.844	79.6	53 - 150
p-Ethyltoluene	1.06	0.878	82.8	59 - 129
1,3,5-Trimethylbenzene	1.06	0.842	79.4	39 - 125
1,2,4-Trimethylbenzene	1.04	0.861	82.8	24 - 131
1,3-Dichlorobenzene	1.03	0.938	91.1	57 - 124
1,4-Dichlorobenzene	1.03	0.931	90.4	56 - 128
1,2-Dichlorobenzene	1.05	0.920	87.6	46 - 117

REPORT OF LABORATORY ANALYSIS

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Table 2.2 Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 1 of 3

Sample ID: 0-130-1004

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	0.388	0.421	8	≤25

Sample ID: 0-130-1044

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25

Sample ID: 0-130-1001

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	0.294	0.323	9	≤25
Tetrachloroethene	48.9	53.9	10	≤25

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Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 2 of 3

Sample ID: 0-130-1012

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Propylene	U	U	NC	≤25
Dichlorodifluoromethane	0.338	0.358	6	≤25
Chloromethane	0.145	0.150	3	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	2.60	2.83	8	≤25
Trichlorofluoromethane	0.204	0.220	8	≤25
Isopropyl Alcohol	0.760	0.886	20	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.190	0.192	1	≤25
Trichlorotrifluoroethane	0.0759	0.0754	0.7	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	0.814	0.861	6	≤25
cis-1,2-Dichloroethene	0.0757	0.0751	0.8	≤25
Ethyl Acetate	0.430	0.475	10	≤25
Hexane	0.0919	0.0998	8	≤25
Chloroform	0.446	0.474	6	≤25
Tetrahydrofuran	0.113	0.120	6	≤25
1,2-Dichloroethane	U	U	NC	≤25
1,1,1-Trichloroethane	U	U	NC	≤25
Benzene	0.0930	0.0960	3	≤25
Carbon Tetrachloride	U	U	NC	≤25
Cyclohexane	U	U	NC	≤25
1,2-Dichloropropane	U	U	NC	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	19.5	20.5	5	≤25
Heptane	U	U	NC	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	0.336	0.358	6	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	0.858	0.786	9	≤25
2-Hexanone	U	U	NC	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	1080	1070	0.9	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	U	U	NC	≤25
m&p-Xylene	U	U	NC	≤25
Bromoform	U	U	NC	≤25
Styrene	U	U	NC	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	U	U	NC	≤25
p-Ethyltoluene	U	U	NC	≤25
1,3,5-Trimethylbenzene	U	U	NC	≤25
1,2,4-Trimethylbenzene	U	U	NC	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	U	U	NC	≤25
1,2-Dichlorobenzene	U	U	NC	≤25

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Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 3 of 3

Sample ID: 0-130-1039

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Propylene	U	U	NC	≤25
Dichlorodifluoromethane	0.358	0.365	2	≤25
Chloromethane	0.673	0.668	0.7	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	461	445	4	≤25
Trichlorofluoromethane	0.208	0.205	1	≤25
Isopropyl Alcohol	5.94	5.58	6	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	4.85	4.93	2	≤25
Trichlorotrifluoroethane	0.0791	0.0796	0.6	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	15.6	15.9	2	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Ethyl Acetate	5.19	5.19	0	≤25
Hexane	9.05	9.18	1	≤25
Chloroform	1.80	1.79	0.6	≤25
Tetrahydrofuran	1.90	1.82	4	≤25
1,2-Dichloroethane	0.257	0.269	5	≤25
1,1,1-Trichloroethane	U	U	NC	≤25
Benzene	4.69	4.81	3	≤25
Carbon Tetrachloride	0.147	0.148	0.7	≤25
Cyclohexane	1.91	1.98	4	≤25
1,2-Dichloropropane	0.229	0.220	4	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Heptane	4.31	4.48	4	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	U	U	NC	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	34700	34800	0.3	≤25
2-Hexanone	U	U	NC	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	4.92	5.08	3	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	12.5	13.1	5	≤25
m&p-Xylene	30.6	32.5	6	≤25
Bromoform	U	U	NC	≤25
Styrene	0.589	0.627	6	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	6.89	7.23	5	≤25
p-Ethyltoluene	2.44	2.53	4	≤25
1,3,5-Trimethylbenzene	1.79	1.88	5	≤25
1,2,4-Trimethylbenzene	5.65	5.94	5	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	0.257	0.265	3	≤25
1,2-Dichlorobenzene	U	U	NC	≤25

REPORT OF LABORATORY ANALYSIS

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DateShipped: 3/2/2012

CarrierName: FedEx

AirbillNo: 899458692192

899458692192
WO # R203001

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/2/12-0009

Cooler #: 4

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
24	0-130-1004	S2A-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	226	14028	-30	3/1/2012	6:28:00 AM
25	0-130-1005	S2A-IA2	TO-15 (Chlorinated)	Air	1	SUMMA	128	13933	-30	3/1/2012	6:35:00 AM
26	0-130-1044	DEC-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	97	14010	-30	3/1/2012	10:36:00 AM
27	0-130-1045	DEC-IA2	TO-15 (Chlorinated)	Air	1	SUMMA	129	13794	-30	3/1/2012	10:44:00 AM
28	0-130-1046	DEC-AMB1	TO-15 (Chlorinated)	Air	1	SUMMA	149	13958	-30	3/1/2012	11:00:00 AM
29	0-130-1049	DEC-IA3	TO-15 (Chlorinated)	Air	1	SUMMA	215	14023	-30	3/1/2012	10:53:00 AM
30	0-130-1050	CRPDC-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	10	13762	-30	3/1/2012	11:20:00 AM
31	0-130-1054	CRPDC-IA2	TO-15 (Chlorinated)	Air	1	SUMMA	47	14000	-30	3/1/2012	11:23:00 AM

Special Instructions: Analyze per PWA. Chlorinated VOC list.	SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #
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Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	<u>Mohamed</u>	3/2/12	FED-EX	3/2/12							
—	<u>FEDEX</u>	—	<u>Abdullah</u>	3/5/12	11:30						
All/Analysis	<u>Abdullah</u>	3/5/12	<u>Tariq</u>	3/5/12	1630						

021

USEPA

DateShipped: 3/2/2012
CarrierName: FedEx
AirbillNo: 8994586921

8692192
W0#R 203001

CHAIN OF CUSTODY RECORD

Cabo Roig

Contact Name: Michael Cartwright
Contact Phone: 732-321-4284

No: 0-130-3/2/12-0010

Cooler #: 5

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
32	0-130-1012	EQP-SS1	TO-15 (Full List)	Soil Gas	1	SUMMA	63	13991	-30	3/1/2012	7:40:00 AM
33	0-130-1013	EQP-SS2	TO-15 (Full List)	Soil Gas	1	SUMMA	228	13789	-30	3/1/2012	7:38:00 AM
34	0-130-1018	EQP-SS3	TO-15 (Full List)	Soil Gas	1	SUMMA	3	14015	-30	3/1/2012	7:36:00 AM
35	0-130-1019	EQP-SS4	TO-15 (Full List)	Soil Gas	1	SUMMA	220	13998	-30	3/1/2012	7:30:00 AM
36	0-130-1020	EQP-SS5	TO-15 (Full List)	Soil Gas	1	SUMMA	14073	13778	-30	3/1/2012	7:28:00 AM
37	0-130-1021	EQP-SS6	TO-15 (Full List)	Soil Gas	1	SUMMA	182	13988	-30	3/1/2012	7:32:00 AM
38	0-130-1022	EQP-SS7	TO-15 (Full List)	Soil Gas	1	SUMMA	266	13990	-30	3/1/2012	7:34:00 AM
39	0-130-1055	CRPDC-AMB1	TO-15 (Chlorinated)	Air	1	SUMMA	74	14029	-30	3/1/2012	11:24:00 AM

Special Instructions: Analyze per PWA. Sample 0-130-1055 gets Chlorinated list only, the remaining samples get Full TO-15 list.

SAMPLES TRANSFERRED FROM

*Sub-slab sample previously collected at Location EQP-SS1 (sample 0-130-1012) indicated concentrations of 4,970 ppbv for PCE, 83 ppbv for TCE and 50 ppbv for DCE. Similar concentrations may be detected at this location and in other soil gas samples collected at locations EQP-SS2 through 7.

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
AU/Analysis	<u>M. Alayli</u>	3/4/12	FED-EX	3/2/12							
FED-EX			<u>J. Alayli</u>	3/5/12	11:30						
AU/Analysis	<u>J. Alayli</u>	3/5/12	<u>B. B.</u>	3/5/12	16:30						

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DateShipped: 3/2/2012

CarrierName: FedEx

Airbill No: 899458692

60

9458692182
W0# R203001

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/2/12-0011

Cooler #: 6

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
40	0-130-1001	S2A-SS2	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	14066	13964	-30	3/1/2012	6:28:00 AM
41	0-130-1002	S2A-SS3	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	41	13923	-30	3/1/2012	6:29:00 AM
42	0-130-1006	S2B-SS1	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	143	13776	-30	3/1/2012	6:42:00 AM
43	0-130-1007	S2B-SS2	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	195	14042	-30	3/1/2012	6:43:00 AM
44	0-130-1008	S2B-SS3	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	227	14043	-30	3/1/2012	6:44:00 AM
45	0-130-1033	EQP-SS8	TO-15 (Full List)	Soil Gas	1	SUMMA	144	14036	-30	3/1/2012	9:30:00 AM
46	0-130-1037	EQP-SS9	TO-15 (Full List)	Soil Gas	1	SUMMA	222	13906	-30	3/1/2012	9:32:00 AM
47	0-130-1039	EQP-SS10	TO-15 (Full List)	Soil Gas	1	SUMMA	236	13944	-30	3/1/2012	10:18:00 AM

Special Instructions: Analyze per PWA. Samples 0-130-1001, 1002, 1006, 1007 and 1008 get Chlorinated VOC list. Samples 0-130-1033, 1037 and 1039 get Full TO-15 list.

*Sub-slab sample previously collected near Location EQP-SS8 (sample 0-130-1033) indicated concentrations of 980 ppbv for PCE, 190 ppbv for TCE and 1,700 ppbv for DCE. Similar concentrations may be detected at this location and other soil gas samples collected at location EQP.

*Soil gas samples previously collected near Location S2A and S2B indicated concentrations ranging from 20 to 2,500 ppbv for PCE and 91 to 120 ppbv for TCE. Similar concentrations may be detected in soil gas samples collected at locations S2A and S2B.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All /Analysis	<u>Mandy</u>	3/2/12	FED-EX	3/2/12	-	←	FED EX	—	<u>Dee</u>	3/5/12	11:30
All /Analysis	<u>Dee</u>	3/5/12	<u>Bob</u>	3/5/12	1630						

023

USEPA

DateShipped: 3/2/2012

CarrierName: FedEx

AirbillNo: 899458692192

o: 899458692192
WO# R203001

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/2/12-0012

Cooler #: 7

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
48	0-130-1003	S2A-SS4	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	14074	14011	-30	3/1/2012	6:30:00 AM
49	0-130-1041	DEC-SS3	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	70	13946	-30	3/1/2012	10:40:00 AM
50	0-130-1042	DEC-SS4	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	76	13911	-30	3/1/2012	10:42:00 AM
51	0-130-1043	DEC-SS5	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	166	13912	-30	3/1/2012	10:36:00 AM
52	0-130-1047	DEC-SS1	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	19	13795	-30	3/1/2012	10:50:00 AM
53	0-130-1048	DEC-SS2	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	24	14008	-30	3/1/2012	10:52:00 AM
54	0-130-1051	CRPDC-SS3	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	160	13929	-30	3/1/2012	11:20:00 AM
55	0-130-1052	CRPDC-SS1	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	112	14047	-30	3/1/2012	11:21:00 AM

Special Instructions: Analyze per PWA. Chlorinated VOC list.

*Soil gas samples previously collected near Location S2A indicated concentrations ranging from 20 to 2,500 ppbv for PCE and 91 to 120 ppbv for TCE. Similar concentrations may be detected in soil gas samples collected at location S2A.

*Soil gas samples previously collected at Locations DEC-SS1 and SS-5 (Samples 0-130-1047 and 1043) were non-detect for PCE, TCE and DEC however soil gas samples collected around the DEC building indicated concentrations of 430 ppbv for PCE and TCE, 850 to 50,200 ppbv for DCE. Similar concentrations may be detected in soil gas samples collected at location DEC.

*Soil gas samples previously collected at Location CRPDC-SS1 (Sample 0-130-1052) indicated concentrations of 64,700 ppbv for PCE and 58 ppbv for TCE. Similar concentrations may be detected at this location and in other soil gas samples collected at location CRPDC.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

024

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
A4/Analyses	Mark G	3/2/12	FED-EX	3/2/12	—	—	FED EX	—	Mark	3/5/12	11:30
All/Analysis	Mark	3/5/12	Bob	3/5/12	1630						

DateShipped: 3/2/2012
CarrierName: FedEx
AirbillNo: 89945869219

10. FUGEX
999458692192
W#R203001

CHAIN OF CUSTODY RECORD

Cabo Rojo
Contact Name: Michael Cartwright
Contact Phone: 732-321-4284

No: 0-130-3/2/12-0013

Cooler #: 8
Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
56	0-130-1053	CRPDC-SS2	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	119	13989	-30	3/1/2012	11:22:00 AM
57	0-130-1057	Trip Blank	TO-15 (Full List)	Air	1	SUMMA	219		-30	3/2/2012	12:00:00 PM

Special Instructions: Analyze per PWA. Sample 0-130-1053 analyzed for chlorinated VOC list only. Trip blank gets full TO-15 analysis.

SAMPLES TRANSFERRED FROM

*Soil gas samples previously collected at Location CRPDC-SS2 (Sample 0-130-1053) indicated concentrations of 4,870 ppbv for PCE and 32 ppbv for TCE. Similar concentrations may be detected at this location.

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All / Analysis	Melinda	3/2/12	FED-EX	3/2/12	-	-	FED-EX	3/5/12	Jeanne	3/5/12	11:30
All / Analysis	Jeanne	3/5/12	B&B	3/5/12	1630						

ANALYTICAL REPORT

Prepared by

Lockheed Martin Information Systems and Global Services/Environmental Services
Scientific, Engineering, Response and Analytical Services

Cabo Rojo Site
Puerto Rico

April 2012

EPA Work Assignment No. SERAS-130
LOCKHEED MARTIN Work Order SER0130
EPA Contract No. EP-W-09-031

Submitted to
J. Catanzarita
EPA/ERT

2890 Woodbridge Avenue
Edison NJ 08837

Vinod Kansal 4/10/12
V. Kansal Date
Analytical Support Leader

Murad Killeen 4/10/12
D. Killeen Date
QA/QC Officer

Domenic LoSurdo 4/10/12
D. Miller Date
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ERT/SERAS

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Appendix A Data for VOC in Air X 043

Appendix A will be furnished on request.



TESTING LABORATORIES INFORMATION

Analysis of Volatile Organic Compounds in Air (SERAS SOP# 1814, EPA Method TO-15)

ERT/SERAS Laboratory
2890 Woodbridge Avenue
Edison, NJ 08837

All analyses were performed according to our NELAP-approved quality assurance program. The test results meet the requirements of the current NELAP standards, where applicable, except as noted in the laboratory case narrative provided. Results are intended to be considered in their entirety and apply only to those analyzed and reported herein.

ERT/SERAS Laboratory is certified by the New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID # 12023 for TO-15 analysis in air.



Detailed Sample Information

<u>SERAS SAMPLE #</u>	<u>Field Sample #</u>
R203016-02	0-130-1144
R203016-04	0-130-1146
R203016-06	0-130-1148
R203016-08	0-130-1150
R203016-09	0-130-1151
R203016-11	0-130-1153
R203016-13	0-130-1155
R203016-15	0-130-1157
R203016-16	0-130-1158
R203016-18	0-130-1160
R203016-20	0-130-1162
R203016-21	0-130-1163
R203016-23	0-130-1165
R203016-25	0-130-1167
R203016-27	0-130-1169
R203016-28	0-130-1170
R203016-30	0-130-1172
R203016-31	0-130-1173
R203016-33	0-130-1175
R203016-34	0-130-1176
R203016-36	0-130-1059
R203016-37	0-130-1060
R203016-39	0-130-1062
R203016-41	0-130-1064
R203016-43	0-130-1066
R203016-45	0-130-1068
R203016-47	0-130-1070
R203016-49	0-130-1072
R203016-50	0-130-1073
R203016-51	0-130-1074
R203016-53	0-130-1076
R203016-55	0-130-1078
R203016-57	0-130-1080
R203016-59	0-130-1082
R203016-61	0-130-1084
R203016-63	0-130-1086
R203016-65	0-130-1088
R203016-66	0-130-1089
R203016-67	0-130-1090
R203016-69	0-130-1092
R203016-71	0-130-1094
R203016-73	0-130-1096
R203016-75	0-130-1098

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Detailed Sample Information (contd)

SERAS SAMPLE #	Field Sample #
R203016-77	0-130-1100
R203016-79	0-130-1102
R203016-80	0-130-1103
R203016-82	0-130-1105
R203016-84	0-130-1107
R203016-85	0-130-1108
R203016-87	0-130-1110
R203016-89	0-130-1112
R203016-91	0-130-1114
R203016-93	0-130-1116
R203016-95	0-130-1118
R203017-01	0-130-1120
R203017-03	0-130-1122
R203017-05	0-130-1124
R203017-06	0-130-1125
R203017-08	0-130-1127
R203017-10	0-130-1129
R203017-12	0-130-1131
R203017-13	0-130-1132
R203017-15	0-130-1134
R203017-17	0-130-1136
R203017-18	0-130-1137
R203017-20	0-130-1139
R203017-22	0-130-1141
R203017-23	0-130-1142

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Introduction

SERAS personnel, in response to WA# SERAS-130, provided analytical support for environmental samples collected from the Cabo Rojo Site in Puerto Rico, as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and QA/QC results.

The samples were treated with procedures consistent with those specified in SERAS SOP #1008, *Operation of Sample Refrigeration Units and Sample Receiving, Handling and Storage*.

Chain of Custody #	Number of Samples	Sampling Date	Date Received	Date Analyzed	Matrix	Analysis/Method	Laboratory	Data Package
2-032112-171616-0015	5	03/21/12	03/23/12	03/23/12 through 03/27/12	Air	TO-15(VOC) SERAS SOP 1814	ERT/SERAS	X 043
2-032112-174259-0016	5							
2-032112-175005-0017	5							
2-032112-175125-0018	5							
2-032112-175226-0019	5							
2-032112-175316-0020	5							
2-032112-175435-0021	5							
2-032112-175708-0022	5							
2-032112-175900-0023	5							
2-032112-180018-0024	5							
2-032112-180128-0025	4							
2-032112-180247-0026	5							
2-032112-180403-0027	4							
2-032112-180503-0028	5							

Case Narrative

Sampling was conducted as per the site-specific Quality Assurance Project Plan (QAPP) and analyzed by the analytical methods stated in the QAPP. The laboratory reported the data to three significant figures. Any other representation of the data is the responsibility of the user. All data validation flags have been inserted into the results tables.

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TO-15 (VOC) in Air Package X 043

The trip blank 130-1142 contained concentrations of benzene, toluene, ethylbenzene and 1,2,4-trimethylbenzene above the Reporting Limit (RL). Data are qualified as follows:

- The results for benzene, toluene, ethylbenzene and 1,2,4-trimethylbenzene in samples 0-130-1172, 0-130-1175, 0-130-1176, 0-130-1062, 0-130-1072, 0-130-1068, 0-130-1134, 0-130-1129, 0-130-1131 and 0-130-1139 are qualified non-detect (U) because the results are less than five times the trip blank concentration in these samples. The RLs for these compounds have been raised to the concentration found in the samples.
- The results for benzene, toluene and 1,2,4-trimethylbenzene in samples 0-130-1066, 0-130-1070, 0-130-1074 and 0-130-1092 are qualified non-detect (U) because the results are less than five times the trip blank concentration in these samples. The RLs for these compounds have been raised to the concentration found in the samples.
- The results for benzene, ethylbenzene and 1,2,4-trimethylbenzene in sample 0-130-1064 are qualified non-detect (U) because the results are less than five times the trip blank concentration in these samples. The RLs for these compounds have been raised to the concentration found in the samples. The RLs for these compounds have been raised to the concentration found in the sample.
- The results for benzene and toluene in samples 0-130-1160, 0-130-1073, 0-130-1094, 0-130-1096 and 0-130-1136 are qualified non-detect (U) because the results are less than five times the trip blank concentration in these samples. The RLs for these compounds have been raised to the concentration found in the samples.
- The results for benzene in samples 0-130-1173, 0-130-1132, 0-130-1141 and 0-130-1137 are qualified non-detect (U) because the results are less than five times the trip blank concentration in these samples. The RLs for these compounds have been raised to the concentration found in the samples.

The results presented in this report only relate to the samples analyzed. All results are intended to be considered in their entirety. The Environmental Response Team/Scientific, Engineering, Response and Analytical Services laboratory is not responsible for utilization of less than the complete report.

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Summary of Abbreviations

BFB	Bromofluorobenzene
C	Centigrade
CLP	Contract Laboratory Program
COC	Chain of Custody
conc	concentration
cont	continued
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
D	(Surrogate Table) value is from a diluted sample and was not calculated
Dioxin	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/MS	Gas Chromatography/ Mass Spectrometry
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MS (BS)	Matrix Spike (Blank Spike)
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
NS	Not Spiked
% D	Percent Difference
% REC	Percent Recovery
SOP	Standard Operating Procedure
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
PQL	Practical Quantitation Limit
PAL	Performance Acceptance Limit
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
SERAS	Scientific, Engineering, Response and Analytical Services
SIM	Selected Ion Monitoring
Sur	Surrogate
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m ³	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	s	sigma

Data Validation Flags

J	Value is estimated	R	Value is unusable
J+	Value is estimated high (metals only)	U	Not detected
J-	Value is estimated low (metals only)	UJ	Not detected and RL is estimated
N	Presumptively present (Aroclors only)		

Rev. 1/14/09



Table 1.1a Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203017-23	R203016-30	R203016-33	R203016-34						
Sample Number	3/23/2012	0-130-1142	0-130-1172	0-130-1176						
Sample Location	Method Blank	Trip Blank	J1-IA1	J2-AMB						
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
Methylene Chloride	U	0.0300	U	0.0300	0.155	0.0300	0.135	0.0300	0.154	0.0300
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
Chloroform	U	0.0300	U	0.0300	0.0415	0.0300	1.70	0.0300	U	0.0300
1,2-Dichloroethane	U	0.0300								
Benzene	U	0.0300	0.164	0.0300	U	0.170	U	0.211	U	0.190
Trichloroethene	U	0.0300								
Toluene	U	0.0300	0.427	0.0300	U	0.931	U	0.802	U	1.33
Tetrachloroethene	U	0.0300								
Ethylbenzene	U	0.0300	0.0319	0.0300	U	0.0924	U	0.0975	U	0.122
1,2,4-Trimethylbenzene	U	0.0300	0.0445	0.0300	U	0.155	U	0.179	U	0.143

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-17	R203016-18	R203016-20	R203016-22	R203016-24
Sample Number	0-130-1059	0-130-1060	0-130-1062	0-130-1064	0-130-1066
Sample Location	MHS-IA1	MHS-IA2	MHS-IA3	MHS-IA4	MHS-IA5

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
Methylene Chloride	0.171	0.0300	0.190	0.0300	0.119	0.0300	0.158	0.0300	0.120	0.0300
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
Chloroform	U	0.0300	U	0.0300	0.0311	0.0300	U	0.0300	U	0.0300
1,2-Dichloroethane	U	0.0300	0.0346	0.0300	U	0.0300	U	0.0300	U	0.0300
Benzene	2.08	0.0300	1.58	0.0300	U	0.159	U	0.176	U	0.128
Trichloroethene	U	0.0300								
Toluene	10.3	0.0300	9.67	0.0300	U	0.617	2.17	0.0300	U	0.643
Tetrachloroethene	U	0.0300								
Ethylbenzene	1.76	0.0300	1.38	0.0300	U	0.154	U	0.157	0.190	0.0300
1,2,4-Trimethylbenzene	1.44	0.0300	1.12	0.0300	U	0.140	U	0.131	U	0.0970

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Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No. R203016-18
 Sample Number 0-130-1160
 Sample Location I12-IA

Analyte	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300
1,1-Dichloroethene	U	0.0300
Methylene Chloride	0.156	0.0300
trans-1,2-Dichloroethene	U	0.0300
1,1-Dichloroethane	U	0.0300
cis-1,2-Dichloroethene	U	0.0300
Chloroform	0.305	0.0300
1,2-Dichloroethane	0.107	0.0300
Benzene	U	0.260
Trichloroethene	U	0.0300
Toluene	U	1.18
Tetrachloroethene	U	0.0300
Ethylbenzene	0.161	0.0300
1,2,4-Trimethylbenzene	0.230	0.0300

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No. R203017-23
 Sample Number 3/23/2012 0-130-1142
 Sample Location Method Blank Trip Blank R203016-02 0-130-1144 PFCS-IA1 R203016-04 0-130-1146 PFCS-IA2 R203016-06 0-130-1148 PFCS-IA3

| Analyte | Results
ppbv | RL
ppbv |
|--------------------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|
| Vinyl Chloride | U | 0.0300 |
| 1,1-Dichloroethene | U | 0.0300 |
| trans-1,2-Dichloroethene | U | 0.0300 |
| 1,1-Dichloroethane | U | 0.0300 |
| cis-1,2-Dichloroethene | U | 0.0300 |
| 1,2-Dichloroethane | U | 0.0300 |
| Trichloroethene | U | 0.0300 |
| Tetrachloroethene | U | 0.0300 |

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No. R203016-08
 Sample Number 0-130-1150
 Sample Location PFCS-IA4 R203016-09 0-130-1151 PFCS-IA5 R203016-11 0-130-1153 PFCS-IA6 R203016-13 0-130-1155 PFCS-IA7 R203016-15 0-130-1157 PFCS-IA8

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300	U	0.0300	0.0447	0.0300	U	0.0300	U	0.0300
1,2-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	U	0.0300	0.0346	0.0300
Trichloroethene	U	0.0300								
Tetrachloroethene	0.0355	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300

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Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203016-16	R203016-20		R203016-21		R203016-23		R203016-25		
Sample Number	0-130-1158	0-130-1162		0-130-1163		0-130-1165		0-130-1167		
Sample Location	PFCS-AMB	15CX-IA1		15CX-IA2		115ACX-IA		13CX-IA		
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	
Vinyl Chloride	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
1,1-Dichloroethene	U	0.0300	0.0399	0.0300	U	0.0300	U	0.0300	U	0.0300
trans-1,2-Dichloroethene	U	0.0300	0.292	0.0300	U	0.0300	U	0.0300	U	0.0300
1,1-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
cis-1,2-Dichloroethene	U	0.0300	0.261	0.0300	U	0.0300	U	0.0300	U	0.0300
1,2-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	0.0505	0.0300	0.0375	0.0300
Trichloroethene	U	0.0300	0.136	0.0300	U	0.0300	U	0.0300	U	0.0300
Tetrachloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-27	R203016-28	
Sample Number	0-130-1169	0-130-1170	
Sample Location	CX6-IA	115ACX-AMB	

Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.300	U	0.0300
1,1-Dichloroethene	U	0.300	U	0.0300
trans-1,2-Dichloroethene	U	0.300	U	0.0300
1,1-Dichloroethane	U	0.300	U	0.0300
cis-1,2-Dichloroethene	U	0.300	U	0.0300
1,2-Dichloroethane	U	0.300	U	0.0300
Trichloroethene	U	0.300	U	0.0300
Tetrachloroethene	0.304	0.300	U	0.0300

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-31	R203016-26		R203016-28		R203016-30	
Sample Number	0-130-1173	0-130-1068	0-130-1070	0-130-1072			
Sample Location	3/24/2012	J1-IA2	MHS-IA6	MHS-IA7	MHS-IA8		

Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300	U	0.300	U	0.0300	U	0.0300
1,1-Dichloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300
Methylene Chloride	U	0.0300	U	0.300	0.132	0.0300	0.153	0.0300
trans-1,2-Dichloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300
1,1-Dichloroethane	U	0.0300	U	0.300	U	0.0300	U	0.0300
cis-1,2-Dichloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300
Chloroform	U	0.0300	U	0.300	U	0.0300	U	0.0300
1,2-Dichloroethane	U	0.0300	U	0.300	U	0.0300	U	0.0300
Benzene	U	0.0300	U	0.416	U	0.126	U	0.183
Trichloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300
Toluene	U	0.0300	5.94	0.300	U	0.825	U	1.12
Tetrachloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300
Ethylbenzene	U	0.0300	0.364	0.300	U	0.128	0.184	0.0300
1,2,4-Trimethylbenzene	U	0.0300	0.800	0.300	U	0.102	U	0.171

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Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203016-31	R203016-32	R203016-69	R203016-71	R203016-73
Sample Number	0-130-1073	0-130-1074	0-130-1092	0-130-1094	0-130-1096
Sample Location	MHS-AMB1	MHS-AMB2	FH-IA	44A-IA	44B-IA

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
Methylene Chloride	0.145	0.0300	0.132	0.0300	0.143	0.0300	0.146	0.0300	0.123	0.0300
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
Chloroform	U	0.0300	U	0.0300	U	0.0300	0.0708	0.0300	0.632	0.0300
1,2-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	U	0.0300	0.0402	0.0300
Benzene	U	0.237	U	0.150	U	0.302	U	0.376	U	0.459
Trichloroethene	U	0.0300								
Toluene	U	1.49	U	1.35	U	1.12	U	1.33	U	1.43
Tetrachloroethene	U	0.0300	0.0822	0.0300	U	0.0300	U	0.0300	U	0.0300
Ethylbenzene	0.189	0.0300	0.276	0.0300	0.160	0.0300	0.201	0.0300	0.253	0.0300
1,2,4-Trimethylbenzene	0.250	0.0300	U	0.145	U	0.205	0.317	0.0300	0.554	0.0300

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-57	R203016-59	R203016-61	R203016-63
Sample Number	3/24/2012	0-130-1080	0-130-1084	0-130-1086
Sample Location	Method Blank	CSA-IA3	CSA-IA4	CSA-IA5

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
1,2-Dichloroethane	U	0.0300	0.0795	0.0300	U	0.0300	U	0.0300	U	0.0300
Trichloroethene	U	0.0300	U	0.0300	U	0.0300	0.0450	0.0300	U	0.0300
Tetrachloroethene	U	0.0300	U	0.0300	0.0302	0.0300	0.0432	0.0300	U	0.0300

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-65	R203016-66	R203016-67	R203016-75	R203016-79
Sample Number	0-130-1088	0-130-1089	0-130-1090	0-130-1098	0-130-1102
Sample Location	CSA-IA7	CSA-IA8	CSA-AMB	NC-IA	10AF-IA

| Analyte | Results
ppbv | RL
ppbv |
|--------------------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|
| Vinyl Chloride | U | 0.0300 |
| 1,1-Dichloroethene | U | 0.0300 |
| trans-1,2-Dichloroethene | U | 0.0300 |
| 1,1-Dichloroethane | U | 0.0300 |
| cis-1,2-Dichloroethene | U | 0.0300 |
| 1,2-Dichloroethane | U | 0.0300 |
| Trichloroethene | U | 0.0300 |
| Tetrachloroethene | U | 0.0300 |

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Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203016-80	R203016-82		R203016-84		R203016-85		R203016-87		
Sample Number	0-130-1103	0-130-1105		0-130-1107		0-130-1108		0-130-1110		
Sample Location	10AF-AMB	12AF-IA		3AF-IA1		3AF-IA2		52H-IA		
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
1,2-Dichloroethane	U	0.0300								
Trichloroethylene	0.0667	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
Tetrachloroethylene	U	0.0300								

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203017-10	R203017-12		R203017-13		R203017-15				
Sample Number	0-130-1129	0-130-1131		J15-IA	J3-IA1	J3-IA2	J4-IA			
Sample Location	Method Blank									
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
1,1-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
Methylene Chloride	U	0.0300	0.144	0.0300	0.136	0.0300	0.238	0.150	0.144	0.0300
trans-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
1,1-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
cis-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
Chloroform	U	0.0300	U	0.0300	0.406	0.0300	U	0.150	0.0341	0.0300
1,2-Dichloroethane	U	0.0300	U	0.0300	0.0439	0.0300	U	0.150	0.0626	0.0300
Benzene	U	0.0300	U	0.158	U	0.206	U	0.514	U	0.208
Trichloroethylene	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
Toluene	U	0.0300	U	0.901	U	1.04	8.09	0.150	U	1.05
Tetrachloroethylene	U	0.0300	U	0.0300	U	0.0300	0.175	0.150	U	0.0300
Ethylbenzene	U	0.0300	U	0.111	U	0.131	0.491	0.150	U	0.139
1,2,4-Trimethylbenzene	U	0.0300	U	0.135	U	0.204	0.370	0.150	U	0.174

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203017-17	R203017-18		R203017-20		R203017-22				
Sample Number	0-130-1136	0-130-1137	PS-AMB	0-130-1139	PS-IA1	0-130-1141	PS-IA2			
Sample Location	L-IA									
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
Methylene Chloride	0.117	0.0300	0.166	0.0300	0.146	0.0300	0.128	0.0300		
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
Chloroform	0.0534	0.0300	U	0.0300	U	0.0300	0.121	0.0300		
1,2-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	0.103	0.0300		
Benzene	U	0.302	U	0.240	U	0.254	U	0.403		
Trichloroethylene	U	0.0300	U	0.0300	U	0.0300	0.107	0.0300		
Toluene	U	1.17	2.30	0.0300	U	0.904	2.55	0.0300		
Tetrachloroethylene	U	0.0300	0.0679	0.0300	U	0.0300	U	0.0300		
Ethylbenzene	0.191	0.0300	0.200	0.0300	U	0.102	0.202	0.0300		
1,2,4-Trimethylbenzene	0.587	0.0300	0.328	0.0300	U	0.156	0.389	0.0300		

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Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203016-77	R203016-89	R203016-91	R203016-93						
Sample Number	3/26/2012	0-130-1100	0-130-1112	0-130-1116						
Sample Location	Method Blank	53DC-IA	8AF-IA	53H-IA						
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U 0.0300		U 0.0342		U 0.0300		U 0.0300		U 0.0300	
1,1-Dichloroethene	U 0.0300		U 0.0342		U 0.0300		U 0.0300		U 0.0300	
trans-1,2-Dichloroethene	U 0.0300		U 0.0342		U 0.0300		U 0.0300		U 0.0300	
1,1-Dichloroethane	U 0.0300		U 0.0342		U 0.0300		U 0.0300		U 0.0300	
cis-1,2-Dichloroethene	U 0.0300		U 0.0342		U 0.0300		U 0.0300		U 0.0300	
1,2-Dichloroethane	U 0.0300		0.0840 0.0342		U 0.0300		U 0.0300		U 0.0300	
Trichloroethene	U 0.0300		U 0.0342		U 0.0300		U 0.0300		U 0.0300	
Tetrachloroethene	U 0.0300		0.0757 0.0342		U 0.0300		U 0.0300		U 0.0300	

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-95	R203017-01	R203017-03	R203017-05						
Sample Number	0-130-1118	0-130-1120	0-130-1122	0-130-1124						
Sample Location	53C-IA	49C-IA	51C-IA	46C-IA1						
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U 0.0300									
1,1-Dichloroethene	U 0.0300									
trans-1,2-Dichloroethene	U 0.0300									
1,1-Dichloroethane	U 0.0300									
cis-1,2-Dichloroethene	U 0.0300									
1,2-Dichloroethane	U 0.0300		U 0.0300		U 0.0300		0.0704 0.0300			
Trichloroethene	U 0.0300									
Tetrachloroethene	0.0565	0.0300	U 0.0300		U 0.0300		U 0.0300		U 0.0300	

Table 1.1a (cont) Result of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203017-08	R203016-53	R203016-55	3/27/2012	R203017-06					
Sample Number	0-130-1127	0-130-1076	0-130-1078	Method Blank	0-130-1125					
Sample Location	50H-IA	CSA-IA1	CSA-IA2		46C-IA2					
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U 0.0300		U 0.0300		U 0.0300		U 0.0300		U 0.0300	
1,1-Dichloroethene	U 0.0300		U 0.0300		U 0.0300		U 0.0300		U 0.0300	
trans-1,2-Dichloroethene	U 0.0300		U 0.0300		U 0.0300		U 0.0300		U 0.0300	
1,1-Dichloroethane	U 0.0300		U 0.0300		U 0.0300		U 0.0300		U 0.0300	
cis-1,2-Dichloroethene	U 0.0300		U 0.0300		U 0.0300		U 0.0300		U 0.0300	
1,2-Dichloroethane	U 0.0300		U 0.0300		U 0.0300		U 0.0300		0.0715 0.0300	
Trichloroethene	U 0.0300		U 0.0300		U 0.0300		U 0.0300		U 0.0300	
Tetrachloroethene	U 0.0300		U 0.0300		U 0.0300		U 0.0300		U 0.0300	

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Table 1.1b Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	3/23/2012	R203017-23	R203016-30	R203016-33	R203016-34
Sample Number		0-130-1142	0-130-1172	0-130-1175	0-130-1176
Sample Location	Method Blank	Trip Blank	J1-IA1	J2-IA	J2-AMB
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U 0.0767		U 0.0767		U 0.0767
1,1-Dichloroethene	U 0.119		U 0.119		U 0.119
Methylene Chloride	U 0.104		U 0.104	0.540 0.104	0.470 0.104
trans-1,2-Dichloroethene	U 0.119		U 0.119		U 0.119
1,1-Dichloroethane	U 0.121		U 0.121		U 0.121
cis-1,2-Dichloroethene	U 0.119		U 0.119		U 0.119
Chloroform	U 0.146		U 0.146	0.203 0.146	8.31 0.146
1,2-Dichloroethane	U 0.121		U 0.121		U 0.121
Benzene	U 0.0958		0.522 0.0958		U 0.673
Trichloroethene	U 0.161		U 0.161		U 0.161
Toluene	U 0.113		1.61 0.113		U 3.51
Tetrachloroethene	U 0.203		U 0.203		U 0.203
Ethylbenzene	U 0.130		0.139 0.130		U 0.423
1,2,4-Trimethylbenzene	U 0.147		0.219 0.147		U 0.879

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-17	R203016-18	R203016-20	R203016-22	R203016-24
Sample Number	0-130-1059	0-130-1060	0-130-1062	0-130-1064	0-130-1066
Sample Location	MHS-IA1	MHS-IA2	MHS-IA3	MHS-IA4	MHS-IA5
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U 0.0767		U 0.0767		U 0.0767
1,1-Dichloroethene	U 0.119		U 0.119		U 0.119
Methylene Chloride	0.593 0.104		0.659 0.104	0.415 0.104	0.549 0.104
trans-1,2-Dichloroethene	U 0.119		U 0.119		U 0.119
1,1-Dichloroethane	U 0.121		U 0.121		U 0.121
cis-1,2-Dichloroethene	U 0.119		U 0.119		U 0.119
Chloroform	U 0.146		U 0.146	0.152 0.146	U 0.146
1,2-Dichloroethane	U 0.121		0.140 0.121		U 0.121
Benzene	6.65 0.0958		5.04 0.0958		U 0.508
Trichloroethene	U 0.161		U 0.161		U 0.161
Toluene	38.8 0.113		36.4 0.113	U 2.33	8.18 0.113
Tetrachloroethene	U 0.203		U 0.203		U 0.203
Ethylbenzene	7.65 0.130		5.99 0.130	U 0.667	U 0.681
1,2,4-Trimethylbenzene	7.08 0.147		5.49 0.147	U 0.687	U 0.645

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Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203016-18
Sample Number	0-130-1160
Sample Location	I12-IA

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U 0.0767	
1,1-Dichloroethene	U 0.119	
Methylene Chloride	0.543 0.104	
trans-1,2-Dichloroethene	U 0.119	
1,1-Dichloroethane	U 0.121	
cis-1,2-Dichloroethene	U 0.119	
Chloroform	1.49 0.146	
1,2-Dichloroethane	0.434 0.121	
Benzene	U 0.829	
Trichloroethene	U 0.161	
Toluene	U 4.43	
Tetrachloroethene	U 0.203	
Ethylbenzene	0.698 0.130	
1,2,4-Trimethylbenzene	1.13 0.147	

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203017-23	R203016-02	R203016-04	R203016-06
Sample Number	3/23/2012	0-130-1142	0-130-1144	0-130-1148
Sample Location	Method Blank	Trip Blank	PFCS-IA1	PFCS-IA3

| Analyte | Results
$\mu\text{g}/\text{m}^3$ | RL
$\mu\text{g}/\text{m}^3$ |
|--------------------------|-------------------------------------|--------------------------------|-------------------------------------|--------------------------------|-------------------------------------|--------------------------------|-------------------------------------|--------------------------------|-------------------------------------|--------------------------------|
| Vinyl Chloride | U 0.0767 | U 0.0767 |
| 1,1-Dichloroethene | U 0.119 | U 0.119 |
| trans-1,2-Dichloroethene | U 0.119 | U 0.119 |
| 1,1-Dichloroethane | U 0.121 | U 0.121 |
| cis-1,2-Dichloroethene | U 0.119 | U 0.119 |
| 1,2-Dichloroethane | U 0.121 | U 0.121 |
| Trichloroethene | U 0.161 | U 0.161 |
| Tetrachloroethene | U 0.203 | U 0.203 |

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-08	R203016-09	R203016-11	R203016-13	R203016-15
Sample Number	0-130-1150	0-130-1151	0-130-1153	0-130-1155	0-130-1157
Sample Location	PFCS-IA4	PFCS-IA5	PFCS-IA6	PFCS-IA7	PFCS-IA8

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U 0.0767	U 0.0767								
1,1-Dichloroethene	U 0.119	U 0.119								
trans-1,2-Dichloroethene	U 0.119	U 0.119								
1,1-Dichloroethane	U 0.121	U 0.121								
cis-1,2-Dichloroethene	U 0.119	U 0.119	U 0.119	U 0.119	0.177 0.119	U 0.119	U 0.119	U 0.119	U 0.119	U 0.119
1,2-Dichloroethane	U 0.121	U 0.121	0.140 0.121	0.121						
Trichloroethene	U 0.161	U 0.161	U 0.161	0.161						
Tetrachloroethene	0.241	0.203	U 0.203	U 0.203	U 0.203	U 0.203	U 0.203	U 0.203	U 0.203	0.203

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Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203016-16	R203016-20	R203016-21	R203016-23	R203016-25
Sample Number	0-130-1158	0-130-1162	0-130-1163	0-130-1165	0-130-1167
Sample Location	PFCS-AMB	15CX-IA1	15CX-IA2	115ACX-IA	13CX-IA

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119	0.158	0.119	U	0.119	U	0.119	U	0.119
trans-1,2-Dichloroethene	U	0.119	1.16	0.119	U	0.119	U	0.119	U	0.119
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	U	0.119	1.03	0.119	U	0.119	U	0.119	U	0.119
1,2-Dichloroethane	U	0.121	U	0.121	U	0.121	0.204	0.121	0.152	0.121
Trichloroethene	U	0.161	0.730	0.161	U	0.161	U	0.161	U	0.161
Tetrachloroethene	U	0.203								

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-27	R203016-28
Sample Number	0-130-1169	0-130-1170
Sample Location	CX6-IA	115ACX-AMB

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.767	U	0.0767
1,1-Dichloroethene	U	1.19	U	0.119
trans-1,2-Dichloroethene	U	1.19	U	0.119
1,1-Dichloroethane	U	1.21	U	0.121
cis-1,2-Dichloroethene	U	1.19	U	0.119
1,2-Dichloroethane	U	1.21	U	0.121
Trichloroethene	U	1.61	U	0.161
Tetrachloroethene	2.06	2.03	U	0.203

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-31	R203016-26	R203016-28	R203016-30
Sample Number	3/24/2012	0-130-1173	0-130-1068	0-130-1070
Sample Location	Method Blank	J1-IA2	MHS-IA6	MHS-IA7

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767	U	0.767	U	0.0767	U	0.0767	U	0.0767
1,1-Dichloroethene	U	0.119	U	1.19	U	0.119	U	0.119	U	0.119
Methylene Chloride	U	0.104	U	1.04	0.460	0.104	0.530	0.104	0.440	0.104
trans-1,2-Dichloroethene	U	0.119	U	1.19	U	0.119	U	0.119	U	0.119
1,1-Dichloroethane	U	0.121	U	1.21	U	0.121	U	0.121	U	0.121
cis-1,2-Dichloroethene	U	0.119	U	1.19	U	0.119	U	0.119	U	0.119
Chloroform	U	0.146	U	1.46	U	0.146	U	0.146	U	0.146
1,2-Dichloroethane	U	0.121	U	1.21	U	0.121	U	0.121	U	0.121
Benzene	U	0.0958	U	1.33	U	0.403	U	0.585	U	0.435
Trichloroethene	U	0.161	U	1.61	U	0.161	U	0.161	U	0.161
Toluene	U	0.113	22.4	1.13	U	3.11	U	4.22	U	2.06
Tetrachloroethene	U	0.203	U	2.03	U	0.203	U	0.203	U	0.203
Ethylbenzene	U	0.130	1.58	1.30	U	0.555	0.798	0.130	U	0.432
1,2,4-Trimethylbenzene	U	0.147	3.93	1.47	U	0.500	U	0.842	U	0.515

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Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203016-31	R203016-32		R203016-69		R203016-71		R203016-73	
Sample Number	0-130-1073	0-130-1074		0-130-1092	FH-IA	0-130-1094	44A-IA	0-130-1096	44B-IA
Sample Location	MHS-AMB1	MHS-AMB2							
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.0767	U	0.0767	U	0.0767	U	0.0767	U
1,1-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	U
Methylene Chloride	0.505	0.104	0.460	0.104	0.497	0.104	0.508	0.104	0.427
trans-1,2-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	U
1,1-Dichloroethane	U	0.121	U	0.121	U	0.121	U	0.121	U
cis-1,2-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	U
Chloroform	U	0.146	U	0.146	U	0.146	0.345	0.146	3.09
1,2-Dichloroethane	U	0.121	U	0.121	U	0.121	U	0.121	0.163
Benzene	U	0.768	U	0.481	U	0.963	U	1.20	U
Trichloroethene	U	0.161	U	0.161	U	0.161	U	0.161	U
Toluene	U	5.60	U	5.09	U	4.20	U	5.02	U
Tetrachloroethene	U	0.203	0.558	0.203	U	0.203	U	0.203	U
Ethylbenzene	0.820	0.130	1.20	0.130	0.693	0.130	0.871	0.130	1.10
1,2,4-Trimethylbenzene	1.23	0.147	U	0.713	U	1.01	1.56	0.147	2.72

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-57	R203016-59		R203016-61		R203016-63	
Sample Number	03/24/2012	0-130-1080	0-130-1082	0-130-1084	0-130-1086	0-130-1086	0-130-1086
Sample Location	Method Blank	CSA-IA3	CSA-IA4	CSA-IA5	CSA-IA6	CSA-IA6	CSA-IA6

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.0767	U	0.0767	U	0.0767	U	0.0767	U
1,1-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	U
trans-1,2-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	U
1,1-Dichloroethane	U	0.121	U	0.121	U	0.121	U	0.121	U
cis-1,2-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	U
1,2-Dichloroethane	U	0.121	0.322	0.121	U	0.121	U	0.121	U
Trichloroethene	U	0.161	U	0.161	U	0.161	0.242	0.161	U
Tetrachloroethene	U	0.203	U	0.203	0.204	0.203	0.293	0.203	U

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-65	R203016-66		R203016-67		R203016-75		R203016-79	
Sample Number	0-130-1088	0-130-1089	0-130-1090	0-130-1098	0-130-1102	0-130-1102	0-130-1102	0-130-1102	0-130-1102
Sample Location	CSA-IA7	CSA-IA8	CSA-AMB	NC-IA	10AF-IA				

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.0767	U	0.0767	U	0.0767	U	0.0767	U
1,1-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	U
trans-1,2-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	U
1,1-Dichloroethane	U	0.121	U	0.121	U	0.121	U	0.121	U
cis-1,2-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	U
1,2-Dichloroethane	U	0.121	U	0.121	U	0.121	U	0.121	U
Trichloroethene	U	0.161	U	0.161	U	0.161	U	0.161	U
Tetrachloroethene	U	0.203	U	0.203	U	0.203	U	0.203	U

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Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203016-80	Sample Number	0-130-1103	Sample Location	10AF-AMB	R203016-82	R203016-84	R203016-85	R203016-87		
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.0767	1,1-Dichloroethene	U	0.119	trans-1,2-Dichloroethene	U	0.119	1,1-Dichloroethane	U	0.121
cis-1,2-Dichloroethene	U	0.119	1,2-Dichloroethane	U	0.121	cis-1,2-Dichloroethene	U	0.119	Trichloroethene	U	0.161
Tetrachloroethene	0.359	0.161	Tetrachloroethene	U	0.203	1,2-Dichloroethene	U	0.203	Vinyl Chloride	U	0.0767

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203017-10	Sample Number	0-130-1129	Sample Location	Method Blank	R203017-12	R203017-13	R203017-15			
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.0767	1,1-Dichloroethene	U	0.119	Methylene Chloride	U	0.104	trans-1,2-Dichloroethene	U	0.500
1,1-Dichloroethene	U	0.119	1,1-Dichloroethane	U	0.121	cis-1,2-Dichloroethene	U	0.119	cis-1,2-Dichloroethene	U	0.119
Methylene Chloride	U	0.104	Chloroform	U	0.146	1,2-Dichloroethane	U	0.121	Trichloroethene	U	0.161
trans-1,2-Dichloroethene	U	0.119	Benzene	U	0.0958	Toluene	U	0.113	Tetrachloroethene	U	0.203
1,1-Dichloroethane	U	0.121	1,2-Dichloroethene	U	0.121	Ethylbenzene	U	0.130	Ethylbenzene	U	0.146
cis-1,2-Dichloroethene	U	0.119	1,2,4-Trimethylbenzene	U	0.147	1,2,4-Trimethylbenzene	U	0.147			
Chloroform	U	0.146									
1,2-Dichloroethane	U	0.121									
Benzene	U	0.0958									
Trichloroethene	U	0.161									
Toluene	U	0.113									
Tetrachloroethene	U	0.203									
Ethylbenzene	U	0.130									
1,2,4-Trimethylbenzene	U	0.147									

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

WA# SERAS-1:

SERAS Sample No.	R203017-17	Sample Number	0-130-1136	Sample Location	L-IA	R203017-18	R203017-20	R203017-22
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.0767	1,1-Dichloroethene	U	0.119	Methylene Chloride	0.408	0.104
1,1-Dichloroethene	U	0.119	trans-1,2-Dichloroethene	U	0.119	trans-1,2-Dichloroethene	0.576	0.104
Methylene Chloride	U	0.104	1,1-Dichloroethane	U	0.121	1,1-Dichloroethane	U	0.121
trans-1,2-Dichloroethene	U	0.119	cis-1,2-Dichloroethene	U	0.119	cis-1,2-Dichloroethene	U	0.119
1,1-Dichloroethane	U	0.121	Chloroform	0.261	0.146	Chloroform	U	0.146
cis-1,2-Dichloroethene	U	0.119	1,2-Dichloroethane	U	0.121	1,2-Dichloroethane	U	0.121
Chloroform	U	0.146	Benzene	U	0.964	Benzene	U	0.964
1,2-Dichloroethane	U	0.121	1,2-Dichloroethene	U	0.768	1,2-Dichloroethene	U	0.768
Benzene	U	0.964	Toluene	U	4.42	Toluene	U	4.42
Trichloroethene	U	0.161	1,2,4-Trimethylbenzene	U	8.68	1,2,4-Trimethylbenzene	U	1.61
Toluene	U	0.161	Ethylbenzene	U	0.130	Ethylbenzene	U	0.130
Tetrachloroethene	U	0.203	1,2,4-Trimethylbenzene	U	0.147	1,2,4-Trimethylbenzene	2.88	0.147
Ethylbenzene	U	0.130						
1,2,4-Trimethylbenzene	U	0.147						

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Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample No.	R203016-77	R203016-89	R203016-91	R203016-93						
Sample Number	3/26/2012	0-130-1100	0-130-1112	0-130-1116						
Sample Location	Method Blank	53DC-IA	8AF-IA	53H-IA						
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767	U	0.0875	U	0.0767	U	0.0767	U	0.0767
1,1-Dichloroethene	U	0.119	U	0.136	U	0.119	U	0.119	U	0.119
trans-1,2-Dichloroethene	U	0.119	U	0.136	U	0.119	U	0.119	U	0.119
1,1-Dichloroethane	U	0.121	U	0.139	U	0.121	U	0.121	U	0.121
cis-1,2-Dichloroethene	U	0.119	U	0.136	U	0.119	U	0.119	U	0.119
1,2-Dichloroethane	U	0.121	0.340	0.139	U	0.121	U	0.121	U	0.121
Trichloroethene	U	0.161	U	0.184	U	0.161	U	0.161	U	0.161
Tetrachloroethene	U	0.203	0.514	0.232	U	0.203	U	0.203	U	0.203

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203016-95	R203017-01	R203017-03	R203017-05						
Sample Number	0-130-1118	0-130-1120	0-130-1122	0-130-1124						
Sample Location	53C-IA	49C-IA	51C-IA	46C-IA1						
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119								
trans-1,2-Dichloroethene	U	0.119								
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	U	0.119								
1,2-Dichloroethane	U	0.121	U	0.121	U	0.121	0.285	0.121	U	0.121
Trichloroethene	U	0.161								
Tetrachloroethene	0.383	0.203	U	0.203	U	0.203	U	0.203	U	0.203

Table 1.1b (cont) Result of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample No.	R203017-08	R203016-53	R203016-55	R203017-06						
Sample Number	0-130-1127	0-130-1076	0-130-1078	03/27/202						
Sample Location	50H-IA	CSA-IA1	CSA-IA2	Method Blank						
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119								
trans-1,2-Dichloroethene	U	0.119								
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	U	0.119								
1,2-Dichloroethane	U	0.121	U	0.121	U	0.121	U	0.121	0.287	0.121
Trichloroethene	U	0.161								
Tetrachloroethene	U	0.203								

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Table 2.1 Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

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Sample LCS: 03/23/2012-1

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.03	0.782	76	53 - 130
1,1-Dichloroethene	1.05	0.767	73	49 - 128
Methylene Chloride	1.05	0.764	73	35 - 134
trans-1,2-Dichloroethene	1.05	0.758	72	62 - 123
1,1-Dichloroethane	1.05	0.807	77	64 - 133
cis-1,2-Dichloroethene	1.05	0.777	74	61 - 129
Chloroform	1.02	0.775	76	62 - 141
1,2-Dichloroethane	1.05	0.803	77	59 - 139
Benzene	1.05	0.861	82	62 - 123
Trichloroethene	1.04	0.802	77	72 - 133
Toluene	1.05	0.815	78	64 - 133
Tetrachloroethene	1.04	0.698	67	66 - 138
Ethylbenzene	1.06	0.842	79	61 - 139
1,2,4-Trimethylbenzene	1.04	0.725	70	24 - 131

Sample LCS: 03/23/2012-2

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.03	0.818	79	53 - 130
1,1-Dichloroethene	1.05	0.830	79	49 - 128
Methylene Chloride	1.05	0.851	81	35 - 134
trans-1,2-Dichloroethene	1.05	0.807	77	62 - 123
1,1-Dichloroethane	1.05	0.851	81	64 - 133
cis-1,2-Dichloroethene	1.05	0.834	79	61 - 129
Chloroform	1.02	0.798	78	62 - 141
1,2-Dichloroethane	1.05	0.882	84	59 - 139
Benzene	1.05	0.988	94	62 - 123
Trichloroethene	1.04	0.896	86	72 - 133
Toluene	1.05	0.950	91	64 - 133
Tetrachloroethene	1.04	0.770	74	66 - 138
Ethylbenzene	1.06	0.988	93	61 - 139
1,2,4-Trimethylbenzene	1.04	1.04	100	24 - 131

Sample LCS: 03/24/2012-1

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.03	0.793	77	53 - 130
1,1-Dichloroethene	1.05	0.794	76	49 - 128
Methylene Chloride	1.05	0.821	78	35 - 134
trans-1,2-Dichloroethene	1.05	0.782	75	62 - 123
1,1-Dichloroethane	1.05	0.823	78	64 - 133
cis-1,2-Dichloroethene	1.05	0.807	77	61 - 129
Chloroform	1.02	0.778	76	62 - 141
1,2-Dichloroethane	1.05	0.856	82	59 - 139
Benzene	1.05	0.965	92	62 - 123
Trichloroethene	1.04	0.875	84	72 - 133
Toluene	1.05	0.926	88	64 - 133
Tetrachloroethene	1.04	0.743	71	66 - 138
Ethylbenzene	1.06	0.962	91	61 - 139
1,2,4-Trimethylbenzene	1.04	0.897	86	24 - 131

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

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Sample LCS: 03/24/2012-2

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.03	0.783	76	53 - 130
1,1-Dichloroethene	1.05	0.796	76	49 - 128
Methylene Chloride	1.05	0.834	79	35 - 134
trans-1,2-Dichloroethene	1.05	0.770	73	62 - 123
1,1-Dichloroethane	1.05	0.804	77	64 - 133
cis-1,2-Dichloroethene	1.05	0.792	75	61 - 129
Chloroform	1.02	0.754	74	62 - 141
1,2-Dichloroethane	1.05	0.864	82	59 - 139
Benzene	1.05	1.01	96	62 - 123
Trichloroethene	1.04	0.874	84	72 - 133
Toluene	1.05	0.965	92	64 - 133
Tetrachloroethene	1.04	0.738	71	66 - 138
Ethylbenzene	1.06	1.01	95	61 - 139
1,2,4-Trimethylbenzene	1.04	1.05	101	24 - 131

Sample LCS: 03/26/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.03	0.777	75	53 - 130
1,1-Dichloroethene	1.05	0.786	75	49 - 128
Methylene Chloride	1.05	0.818	78	35 - 134
trans-1,2-Dichloroethene	1.05	0.779	74	62 - 123
1,1-Dichloroethane	1.05	0.828	79	64 - 133
cis-1,2-Dichloroethene	1.05	0.799	76	61 - 129
Chloroform	1.02	0.782	77	62 - 141
1,2-Dichloroethane	1.05	0.869	83	59 - 139
Benzene	1.05	0.971	93	62 - 123
Trichloroethene	1.04	0.869	84	72 - 133
Toluene	1.05	0.942	90	64 - 133
Tetrachloroethene	1.04	0.757	73	66 - 138
Ethylbenzene	1.06	0.984	93	61 - 139
1,2,4-Trimethylbenzene	1.04	0.852	82	24 - 131

REPORT OF LABORATORY ANALYSIS

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Table 2.2 Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 1 of 3

Sample: 0-130-1144

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25

Sample: 0-130-1146

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25

Sample: 0-130-1148

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25

REPORT OF LABORATORY ANALYSIS

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Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 2 of 3

Sample: 0-130-1150

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	0.0355	0.0445	20	≤25

Sample: 0-130-1068

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.132	0.146	10	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Chloroform	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Benzene	0.126	0.142	10	≤25
Trichloroethene	U	U	NC	≤25
Toluene	0.825	0.958	10	≤25
Tetrachloroethene	U	U	NC	≤25
Ethylbenzene	0.128	0.147	10	≤25
1,2,4-Trimethylbenzene	0.102	0.120	20	≤25

Sample: 0-130-1070

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.153	0.175	10	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Chloroform	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Benzene	0.183	0.219	20	≤25
Trichloroethene	U	U	NC	≤25
Toluene	1.12	1.36	20	≤25
Tetrachloroethene	U	U	NC	≤25
Ethylbenzene	0.184	0.223	20	≤25
1,2,4-Trimethylbenzene	0.171	0.215	20	≤25

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Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 3 of 3

Sample: 0-130-1072

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.127	0.141	10	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Chloroform	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Benzene	0.136	0.148	8	≤25
Trichloroethene	U	U	NC	≤25
Toluene	0.547	0.605	10	≤25
Tetrachloroethene	U	U	NC	≤25
Ethylbenzene	0.0994	0.108	8	≤25
1,2,4-Trimethylbenzene	0.105	0.113	7	≤25

Sample: 0-130-1114

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25

REPORT OF LABORATORY ANALYSIS

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USEPA

Date Shipped: 3/1/2012

Carrier Name: FedEx

Airbill No: 899458692181

WOFER 203016

CHAIN OF CUSTODY RECORD

No: 2-032112-171616-0015

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

Cooler #: 1

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressur e	Stop Pressur e	Stop Date	Stop Time
01	0-130-1143	PFCS-SS1	TCE, PCE plus 6	Soil Gas	1	SUMMA	14240	14007	-30	-6	3/21/2012	8:34:00 AM
02	0-130-1144	PFCS-IA1	TCE, PCE plus 6	Air	1	SUMMA	115	14029	-30	-2	3/21/2012	8:34:00 AM
03	0-130-1145	PFCS-SS2	TCE, PCE plus 6	Soil Gas	1	SUMMA	14230-13 14238 3/21/12	13780	-30	-6.5	3/21/2012	8:38:00 AM
04	0-130-1146	PFCS-IA2	TCE, PCE plus 6	Air	1	SUMMA	19	13799	-30	-1.5	3/21/2012	8:38:00 AM
05	0-130-1147	PFCS-SS3	TCE, PCE plus 6	Soil Gas	1	SUMMA	138	13913	-30	-6.5	3/21/2012	8:44:00 AM
06	0-130-1148	PFCS-IA3	TCE, PCE plus 6	Air	1	SUMMA	111	13908	-30	-2.5	3/21/2012	8:44:00 AM
07	0-130-1149	PFCS-SS4	TCE, PCE plus 6	Soil Gas	1	SUMMA	195	14032	-30	-6	3/21/2012	8:48:00 AM
08	0-130-1150	PFCS-IA4	TCE, PCE plus 6	Air	1	SUMMA	223	13906	-30	-3	3/21/2012	8:48:00 AM
09	0-130-1151	PFCS-IA5	TCE, PCE plus 6	Air	1	SUMMA	1138	13990	-30	-2.5	3/21/2012	8:48:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM	
	CHAIN OF CUSTODY #	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Plutonium	F. B. S.	3/21/12	Mary Hartin	3/23/12	8:00	All Analyses	Mary Hartin	3/23/12	F. B. S.	3/23/12	11:00

021

USEPA
SERAS-130-DAR-04102

CHAIN OF CUSTODY RECORD

No: 2-032112-174259-0016

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

Cooler #: 1

Lab: SERAS

WOF# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop Date	Stop Time
10	0-130-1152	PFCS-SS5	TCE, PCE plus 6	Soil Gas	1	SUMMA	104	13923	-30	-11.5	3/21/2012	8:54:00 AM
11	0-130-1153	PFCS-IA6	TCE, PCE plus 6	Air	1	SUMMA	184	13766	-30	-3	3/21/2012	8:54:00 AM
12	0-130-1154	PFCS-SS6	TCE, PCE plus 6	Soil Gas	1	SUMMA	24	13929	-30	-6	3/21/2012	9:04:00 AM
13	0-130-1155	PFCS-IA7	TCE, PCE plus 6	Air	1	SUMMA	11508	13911	-30	-3	3/21/2012	9:04:00 AM
14	0-130-1156	PFCS-SS7	TCE, PCE plus 6	Soil Gas	1	SUMMA	241	13936	-30	-7.5	3/21/2012	8:59:00 AM
15	0-130-1157	PFCS-IA8	TCE, PCE plus 6	Air	1	SUMMA	14246	13761	-30	-2.5	3/21/2012	8:59:00 AM
16	0-130-1158	PFCS-AMB	TCE, PCE plus 6	Air	1	SUMMA	22	13781	-30	-2.5	3/21/2012	9:07:00 AM
17	0-130-1159	I12-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	12625	13789	-30	-6	3/21/2012	12:05:00 PM
18	0-130-1160	I12-IA	TCE, PCE plus 12	Air	1	SUMMA	200	14016	-30	-5	3/21/2012	12:05:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #
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Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
4/14/12	RJL	3/21/12	Zonya P. Martin	3/23/12	8:00	All Analyses	Zonya P. Martin	3/23/12	RJL	3/28/12	10:00

USEPA

CHAIN OF CUSTODY RECORD 20105-0017

No: 2-032112-175005-0017

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WOF# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
19	0-130-1161	15CX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	256	13782	-30	-7	3/21/2012	1:35:00 PM
20	0-130-1162	15CX-IA1	TCE, PCE plus 6	Air	1	SUMMA	14068	14039	-30	-4	3/21/2012	1:35:00 PM
21	0-130-1163	15CX-IA2	TCE, PCE plus 6	Air	1	SUMMA	14072	13790	-30	-5.5	3/21/2012	1:35:00 PM
22	0-130-1164	115ACX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	23	13988	-30	-6	3/21/2012	1:44:00 PM
23	0-130-1165	115ACX-IA	TCE, PCE plus 6	Air	1	SUMMA	53	13775	-30	-6	3/21/2012	1:44:00 PM
24	0-130-1166	13CX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	55	13794	-30	-5	3/21/2012	1:50:00 PM
25	0-130-1167	13CX-IA	TCE, PCE plus 6	Air	1	SUMMA	260	14003	-30	-5.5	3/21/2012	1:50:00 PM
26	0-130-1168	CX6-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	14	14011	-30	-5	3/21/2012	1:57:00 PM
27	0-130-1169	CX6-IA	TCE, PCE plus 6	Air	1	SUMMA	181	14024	-30	-30	3/21/2012	1:57:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analyses	PBS	3/21/12	Jung, B.	3/23/12	8:00	All/Analyses	Jung, B.	3/23/12	PBS	3/23/12	11:00

USEPA

SERAS-130-DAR-041012

CHAIN OF CUSTODY RECORD

No: 2-032112-175125-0018

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WOT# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressur e	Stop Pressur e	Stop_Dat e	Stop_Time
28	0-130-1170	115ACX-AMB	TCE, PCE plus 6	Air	1	SUMMA	70	13946	-30	-7	3/21/2012	1:44:00 PM
29	0-130-1171	J1-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	226	13939	-30	-7	3/21/2012	2:21:00 PM
30	0-130-1172	J1-IA1	TCE, PCE plus 12	Air	1	SUMMA	170	14034	-30	-5	3/21/2012	2:21:00 PM
31	0-130-1173	J1-IA2	TCE, PCE plus 12	Air	1	SUMMA	14223	14021	-30	-30	3/21/2012	2:21:00 PM
32	0-130-1174	J2-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	215	13934	-30	-5.5	3/21/2012	3:06:00 PM
33	0-130-1175	J2-IA	TCE, PCE plus 12	Air	1	SUMMA	71	14048	-30	-6	3/21/2012	3:06:00 PM
34	0-130-1176	J2-AMB	TCE, PCE plus 12	Air	1	SUMMA	81	13788	-30	-6	3/21/2012	3:06:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

							SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #					
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Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ANALYSIS	P. J. Cartwright	3/23/12	M. Cartwright	3/23/12	8:00	All/Analysis	Z. J. Cartwright	3/23/12	P. J. Cartwright	3/23/12	11:00

CHAIN OF CUSTODY RECORD

No: 2-032112-175226-0019

Cabo Rojo
Contact Name: Michael Cartwright
Contact Phone: 732-321-4284Cooler #: 1
Lab: SERAS

WOF# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop Date	Stop Time	
35	0-130-1058	MHS-SS1	TCE, PCE plus 12	Soil Gas	1	SUMMA	219	13928	-30	-2.5	3/21/2012	8:20:00 AM	
36	0-130-1059	MHS-IA1	TCE, PCE plus 12	Air	1	SUMMA	261	14005	-30	-1.5	3/21/2012	8:20:00 AM	
37	0-130-1060	MHS-IA2	TCE, PCE plus 12	Air	1	SUMMA	14218	13787	-30	-6	3/21/2012	8:20:00 AM	
38	0-130-1061	MHS-SS2	TCE, PCE plus 12	Soil Gas	1	SUMMA	12	13914	-30	-0.5	3/21/2012	8:26:00 AM	
39	0-130-1062	MHS-IA3	TCE, PCE plus 12	Air	1	SUMMA	173	13782	13982	-30	3/21/2012	8:26:00 AM	
40	0-130-1063	MHS-SS3	TCE, PCE plus 12	Soil Gas	1	SUMMA	193	13916	13982	-30	-2.5	3/21/2012	8:33:00 AM
41	0-130-1064	MHS-IA4	TCE, PCE plus 12	Air	1	SUMMA	209	14001	-30	-8	3/21/2012	8:33:00 AM	
42	0-130-1065	MHS-SS4	TCE, PCE plus 12	Soil Gas	1	SUMMA	57	14041	-30	-0.5	3/21/2012	8:38:00 AM	
43	0-130-1066	MHS-IA5	TCE, PCE plus 12	Air	1	SUMMA	231	14019	-30	-2	3/21/2012	8:38:00 AM	

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Reanalysis	<i>BS</i>	3/21/12	<i>May Morris</i>	3/23/12	8:00	All Analys1's	<i>May Morris</i>	3/23/12	<i>BS</i>	3/23/12	1100

CHAIN OF CUSTODY RECORD

No: 2-032112-175316-0020

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WOF# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Date	Stop_Time
44	0-130-1067	MHS-SS5	TCE, PCE plus 12	Soil Gas	1	SUMMA	257	13794	-30	-3.5	3/21/2012	8:43:00 AM
45	0-130-1068	MHS-IA6	TCE, PCE plus 12	Air	1	SUMMA	66	13953	-30	-4	3/21/2012	8:43:00 AM
46	0-130-1069	MHS-SS6	TCE, PCE plus 12	Soil Gas	1	SUMMA	14069	13921	-30	-3	3/21/2012	8:52:00 AM
47	0-130-1070	MHS-IA7	TCE, PCE plus 12	Air	1	SUMMA	179	13798	-30	-4.5	3/21/2012	8:52:00 AM
48	0-130-1071	MHS-SS7	TCE, PCE plus 12	Soil Gas	1	SUMMA	224	14037	-30	-1	3/21/2012	8:48:00 AM
49	0-130-1072	MHS-IA8	TCE, PCE plus 12	Air	1	SUMMA	26	13960	-30	-1.5	3/21/2012	8:48:00 AM
50	0-130-1073	MHS-AMB1	TCE, PCE plus 12	Air	1	SUMMA	148	14015	-30	-2	3/21/2012	9:01:00 AM
51	0-130-1074	MHS-AMB2	TCE, PCE plus 12	Air	1	SUMMA	239	13942	-30	-2	3/21/2012	9:05:00 AM
52	0-130-1075	CSA-SS1	TCE, PCE plus 6	Soil Gas	1	SUMMA	263	13933	-30	-4	3/21/2012	9:35:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #	
	Date	Date

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Analysis	FLB	3/21/12	mgm	3/23/12	8:00	All/Analysis	mgm	3/23/12	FLB	3/23/12	11:00

CHAIN OF CUSTODY RECORD

No: 2-032112-175435-0021

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WOF#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
53	0-130-1076	CSA-IA1	TCE, PCE plus 6	Air	1	SUMMA	5	13784	-30	-7	3/21/2012	9:35:00 AM
54	0-130-1077	CSA-SS2	TCE, PCE plus 6	Soil Gas	1	SUMMA	152	13948	-30	-3.5	3/21/2012	9:39:00 AM
55	0-130-1078	CSA-IA2	TCE, PCE plus 6	Air	1	SUMMA	178	13802	-30	-3	3/21/2012	9:39:00 AM
56	0-130-1079	CSA-SS3	TCE, PCE plus 6	Soil Gas	1	SUMMA	1131	14004	-30	-1	3/21/2012	9:44:00 AM
57	0-130-1080	CSA-IA3	TCE, PCE plus 6	Air	1	SUMMA	68	14020	-30	-3	3/21/2012	9:44:00 AM
58	0-130-1081	CSA-SS4	TCE, PCE plus 6	Soil Gas	1	SUMMA	79	14035	-30	-3	3/21/2012	9:52:00 AM
59	0-130-1082	CSA-IA4	TCE, PCE plus 6	Air	1	SUMMA	147	13912	-30	-0.5	3/21/2012	9:52:00 AM
60	0-130-1083	CSA-SS5	TCE, PCE plus 6	Soil Gas	1	SUMMA	34	13785	-30	-2	3/21/2012	9:57:00 AM
61	0-130-1084	CSA-IA5	TCE, PCE plus 6	Air	1	SUMMA	37	13795	-30	-3.5	3/21/2012	9:57:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM	
	CHAIN OF CUSTODY #	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
surfaces	RJH	3/21/12	Jung Pottier	3/23/12	8:00	All/Analysis	Jung Pottier	3/23/12	RJH	3/23/12	11:00

USEPA

SERASS-130-DAR-041012

CHAIN OF CUSTODY RECORD

No: 2-032112-175708-0022

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WOT#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
62	0-130-1085	CSA-SS6	TCE, PCE plus 6	Soil Gas	1	SUMMA	213	13922	-30	-3	3/21/2012	10:02:00 AM
63	0-130-1086	CSA-IA6	TCE, PCE plus 6	Air	1	SUMMA	137	13776	-30	-3	3/21/2012	10:02:00 AM
64	0-130-1087	CSA-SS7	TCE, PCE plus 6	Soil Gas	1	SUMMA	159	14050	-30	-2.5	3/21/2012	10:07:00 AM
65	0-130-1088	CSA-IA7	TCE, PCE plus 6	Air	1	SUMMA	75	13777	-30	-3	3/21/2012	10:07:00 AM
66	0-130-1089	CSA-IA8	TCE, PCE plus 6	Air	1	SUMMA	242	13943	-30	-1	3/21/2012	10:07:00 AM
67	0-130-1090	CSA-AMB	TCE, PCE plus 6	Air	1	SUMMA	238	13765	-30	-3	3/21/2012	9:48:00 AM
68	0-130-1091	FH-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	118	13767	-30	-4	3/21/2012	10:48:00 AM
69	0-130-1092	FH-IA	TCE, PCE plus 12	Air	1	SUMMA	103	13918	-30	-3	3/21/2012	10:48:00 AM
70	0-130-1093	44A-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	186	13937	-30	-3.5	3/21/2012	10:51:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Analyses	<i>J. P. Cartwright</i>	3/21/12	<i>M. Cartwright</i>	3/23/12	8:00	All Analyses	<i>J. P. Cartwright</i>	3/23/12	<i>R. J. P.</i>	3/23/12	11:00

USEPA
SERAS-130-DAR-041012

CHAIN OF CUSTODY RECORD

No: 2-032112-175900-0023

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WOF# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
71	0-130-1094	44A-IA	TCE, PCE plus 12	Air	1	SUMMA	222	14023	-30	-2.5	3/21/2012	10:51:00 AM
72	0-130-1095	44B-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	119	13935	-30	-4.5	3/21/2012	10:56:00 AM
73	0-130-1096	44B-IA	TCE, PCE plus 12	Air	1	SUMMA	47	13764	-30	-2	3/21/2012	10:56:00 AM
74	0-130-1097	NC-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	107	14038	-30	-4.5	3/21/2012	11:09:00 AM
75	0-130-1098	NC-IA	TCE, PCE plus 6	Air	1	SUMMA	206	14012	-30	-3	3/21/2012	11:09:00 AM
76	0-130-1099	53DC-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	157	13991	-30	-4	3/21/2012	11:17:00 AM
77	0-130-1100	53DC-IA	TCE, PCE plus 6	Air	1	SUMMA	43	13793	-30	-8	3/21/2012	11:17:00 AM
78	0-130-1101	10AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	255	13915	-30	-4.5	3/21/2012	11:27:00 AM
79	0-130-1102	10AF-IA	TCE, PCE plus 6	Air	1	SUMMA	59	13986	-30	-3	3/21/2012	11:27:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM	
	CHAIN OF CUSTODY #	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Analyses	M. Cartwright	3/21/12	Zonya Flamm	3/23/12	8:00	All Analyses	Zonya Flamm	3/23/12	J. S.	3/23/12	11:00

029

CHAIN OF CUSTODY RECORD

No: 2-032112-180018-0024

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

Cooler #. 1

Lab: SERAS

WOT#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
80	0-130-1103	10AF-AMB	TCE, PCE plus 6	Air	1	SUMMA	14251	13779	-30	-2.5	3/21/2012	11:27:00 AM
81	0-130-1104	12AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	130	13941	-30	-4	3/21/2012	11:33:00 AM
82	0-130-1105	12AF-IA	TCE, PCE plus 6	Air	1	SUMMA	25	13993	-30	-3.5	3/21/2012	11:33:00 AM
83	0-130-1106	3AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	243	13925	-30	-3.5	3/21/2012	11:43:00 AM
84	0-130-1107	3AF-IA1	TCE, PCE plus 6	Air	1	SUMMA	10	13983	-30	-3	3/21/2012	11:43:00 AM
85	0-130-1108	3AF-IA2	TCE, PCE plus 6	Air	1	SUMMA	191	13996	-30	-2.5	3/21/2012	11:43:00 AM
86	0-130-1109	52H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	63	13778	-30	-3.5	3/21/2012	11:54:00 AM
87	0-130-1110	52H-IA	TCE, PCE plus 6	Air	1	SUMMA	14220	13954	-30	-0.5	3/21/2012	11:54:00 AM
88	0-130-1111	8AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	97	14026	-30	-4	3/21/2012	11:49:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	R. S.	3/21/12	M. Cartwright	3/23/12	8:00	All/Analysis	M. Cartwright	3/23/12	R. S.	3/23/12	11:00

CHAIN OF CUSTODY RECORD

No: 2-032112-180128-0025

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WOT# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Dat	Stop_Time
89	0-130-1112	8AF-IA	TCE, PCE plus 6	Air	1	SUMMA	156	13792	-30	-3.5	3/21/2012	11:49:00 AM
90	0-130-1113	55H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	65	13762	-30	-4	3/21/2012	12:03:00 PM
91	0-130-1114	55H-IA	TCE, PCE plus 6	Air	1	SUMMA	8	13801	-30	-2.5	3/21/2012	12:03:00 PM
92	0-130-1115	53H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	192	13998 3/21/2012	-30	-1	3/21/2012	12:10:00 PM
93	0-130-1116	53H-IA	TCE, PCE plus 6	Air	1	SUMMA	14070	13995 3/21/2012	-30	-3	3/21/2012	12:10:00 PM
94	0-130-1117	53C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	7	14010	-30	-4	3/21/2012	3:41:00 PM
95	0-130-1118	53C-IA	TCE, PCE plus 6	Air	1	SUMMA	280	13919	-30	-5	3/21/2012	3:41:00 PM
96	0-130-1119	49C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	203	13952	-30	-5	3/21/2012	1:36:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM	
	CHAIN OF CUSTODY #	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
all/Analys	P.Sch	3/21/12	Jay Poirier	3/23/12	8:00	All/Analys	Jay Poirier	3/23/12	Jay P	3/23/12	11:00

USEPA

SERAS-130-DAR-0410-03

CHAIN OF CUSTODY RECORD

No: 2-032112-180247-0026

Cooler #: 1

Lab: SERAS

R203017

WOT# R203016 M 3/23/12

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop Date	Stop Time
07	0-130-1120	49C-IA	TCE, PCE plus 6	Air	1	SUMMA	216	14044	-30	-4	3/21/2012	1:36:00 PM
08	0-130-1121	51C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	101	13939	-30	-4.5	3/21/2012	1:52:00 PM
03	0-130-1122	51C-IA	TCE, PCE plus 6	Air	1	SUMMA	180	13769	-30	-3	3/21/2012	1:52:00 PM
04	0-130-1123	46C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	264	13917	-30	-4.5	3/21/2012	1:45:00 PM
05	0-130-1124	46C-IA1	TCE, PCE plus 6	Air	1	SUMMA	36	13962	-30	-2	3/21/2012	1:45:00 PM
06	0-130-1125	46C-IA2	TCE, PCE plus 6	Air	1	SUMMA	150	13997	-30	-2	3/21/2012	1:45:00 PM
07	0-130-1126	50H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	13	14008	-30	-5	3/21/2012	1:59:00 PM
08	0-130-1127	50H-IA	TCE, PCE plus 6	Air	1	SUMMA	27	14013	-30	-2	3/21/2012	1:59:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analys	<i>M. Cartwright</i>	3/21/12	<i>Jerry Cartwright</i>	3/23/12	8:00	All/Analys	<i>Jerry Cartwright</i>	3/23/12	<i>PC</i>	3/23/12	11:00

032

CHAIN OF CUSTODY RECORD

No: 2-032112-180403-0027

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

Cooler #, 1

Lab: SERAS

WO# R203017

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
09	0-130-1128	I15-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	40	13920	-30	-4	3/21/2012	2:22:00 PM
10	0-130-1129	I15-IA	TCE, PCE plus 12	Air	1	SUMMA	211	14030	-30	-3.5	3/21/2012	2:22:00 PM
11	0-130-1130	J3-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	176	13949	-30	-27	3/21/2012	2:28:00 PM
12	0-130-1131	J3-IA1	TCE, PCE plus 12	Air	1	SUMMA	182	14040	-30	-4.5	3/21/2012	2:28:00 PM
13	0-130-1132	J3-IA2	TCE, PCE plus 12	Air	1	SUMMA	14224	13768	-30	-29	3/21/2012	2:28:00 PM
14	0-130-1133	J4-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	194	13994	-30	-5.5	3/21/2012	2:36:00 PM
15	0-130-1134	J4-IA	TCE, PCE plus 12	Air	1	SUMMA	274	14018	-30	-4	3/21/2012	2:36:00 PM
16	0-130-1135	L-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	96	13995	-30	-5.5	3/21/2012	2:46:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM	
	CHAIN OF CUSTODY #	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ANALYSIS	<i>M. Cartwright</i>	3/21/12	<i>M. Cartwright</i>	3/23/12	8:00	ANALYSIS	<i>M. Cartwright</i>	3/23/12	<i>D. Sosa</i>	3/23/12	11:00

CHAIN OF CUSTODY RECORD

No: 2-032112-180503-0028

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WO# R203017

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
17	0-130-1136	L-IA	TCE, PCE plus 12	Air	1	SUMMA	139	13985	-30	-4.5	3/21/2012	2:46:00 PM
18	0-130-1137	PS-AMB	TCE, PCE plus 12	Air	1	SUMMA	78	13760	-30	-3.5	3/21/2012	3:00:00 PM
19	0-130-1138	PS-SS1	TCE, PCE plus 12	Soil Gas	1	SUMMA	120	14000	-30	-5	3/21/2012	2:51:00 PM
20	0-130-1139	PS-IA1	TCE, PCE plus 12	Air	1	SUMMA	62	14027	-30	-3	3/21/2012	2:51:00 PM
21	0-130-1140	PS-SS2	TCE, PCE plus 12	Soil Gas	1	SUMMA	32	13947	-30	-5.5	3/21/2012	2:56:00 PM
22	0-130-1141	PS-IA2	TCE, PCE plus 12	Air	1	SUMMA	236	13927	-30	-4.5	3/21/2012	2:56:00 PM
23	0-130-1142	Trip Blank	TCE, PCE plus 12	Air	1	SUMMA	14249	na	-30	-30	3/21/2012	4:36:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analyses	PPSh	3/21/12	Tony Ratto	3/23/12	8:00	All/Analyses	Tony Ratto	3/23/12	PPSh	3/23/12	11:00

ANALYTICAL REPORT

Prepared by

Lockheed Martin Information Systems and Global Services/Environmental Services
Scientific, Engineering, Response and Analytical Services

Cabo Rojo Site
Cabo Rojo, Puerto Rico

April 2012

EPA Work Assignment No. SERAS-130
LOCKHEED MARTIN Work Order SER0130
EPA Contract No. EP-W-09-031

Submitted to
J. Catanzarita
EPA/ERT

2890 Woodbridge Avenue
Edison NJ 08837

Vinod Kansal 4/12/12
V. Kansal Date
Analytical Support Leader

D. Killeen 4/11/12
D. Killeen Date
QA/QC Officer

D. Miller 4/12/12
D. Miller Date
Program Manager

Analysis by:
ERT/SERAS

Prepared by:
Y. Mehra

Validated by:
R. Varsolona

REPORT OF LABORATORY ANALYSIS
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Appendices

Appendix A Data for VOC in Air

X 044

Appendix A will be furnished on request.





TESTING LABORATORIES INFORMATION

Analysis of Volatile Organic Compounds in Air (SERAS SOP# 1814, EPA Method TO-15)

ERT/SERAS Laboratory
2890 Woodbridge Avenue
Edison, NJ 08837

All analyses were performed according to our NELAP-approved quality assurance program. The test results meet the requirements of the current NELAP standards, where applicable, except as noted in the laboratory case narrative provided. Results are intended to be considered in their entirety and apply only to those analyzed and reported herein.

ERT/SERAS Laboratory is certified by the New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID # 12023 for TO-15 analysis in air.





Detailed Sample Information

<u>SERAS SAMPLE #</u>	<u>Field Sample #</u>
R203016-01	0-130-1143
R203016-03	0-130-1145
R203016-05	0-130-1147
R203016-07	0-130-1149
R203016-10	0-130-1152
R203016-12	0-130-1154
R203016-14	0-130-1156
R203016-17	0-130-1159
R203016-19	0-130-1161
R203016-22	0-130-1164
R203016-24	0-130-1166
R203016-26	0-130-1168
R203016-29	0-130-1171
R203016-32	0-130-1174
R203016-35	0-130-1058
R203016-38	0-130-1061
R203016-40	0-130-1063
R203016-42	0-130-1065
R203016-44	0-130-1067
R203016-46	0-130-1069
R203016-48	0-130-1071
R203016-52	0-130-1075
R203016-54	0-130-1077
R203016-56	0-130-1079
R203016-58	0-130-1081
R203016-60	0-130-1083
R203016-62	0-130-1085
R203016-64	0-130-1087
R203016-68	0-130-1091
R203016-70	0-130-1093
R203016-72	0-130-1095
R203016-74	0-130-1097
R203016-76	0-130-1099
R203016-78	0-130-1101
R203016-81	0-130-1104
R203016-83	0-130-1106
R203016-86	0-130-1109
R203016-88	0-130-1111
R203016-90	0-130-1113
R203016-92	0-130-1115
R203016-94	0-130-1117
R203016-96	0-130-1119

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Detailed Sample Information (cont)

<u>SERAS SAMPLE #</u>	<u>Field Sample #</u>
R203017-02	0-130-1121
R203017-04	0-130-1123
R203017-07	0-130-1126
R203017-09	0-130-1128
R203017-11	0-130-1130
R203017-14	0-130-1133
R203017-16	0-130-1135
R203017-19	0-130-1138
R203017-21	0-130-1140

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Introduction

SERAS personnel, in response to WA# SERAS-130, provided analytical support for environmental samples collected from the Cabo Rojo Site in Cabo Rojo, Puerto Rico, as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and QA/QC results.

The samples were treated with procedures consistent with those specified in SERAS SOP #1008, *Operation of Sample Refrigeration Units and Sample Receiving, Handling and Storage*.

Chain of Custody #	Number of Samples	Sampling Date	Date Received	Date Analyzed	Matrix	Analysis/Method	Laboratory	Data Package
2-032112-171616-0015	4	03/21/12	03/23/12	03/27/12 through 03/29/12	Soil Gas	TO-15(VOC) SERAS SOP 1814	ERT/SERAS	X 044
2-032112-174259-0016	4							
2-032112-175005-0017	4							
2-032112-175125-0018	2							
2-032112-175226-0019	4							
2-032112-175316-0020	4							
2-032112-175435-0021	4							
2-032112-175708-0022	4							
2-032112-175900-0023	4							
2-032112-180018-0024	4							
2-032112-180128-0025	4							
2-032112-180247-0026	3							
2-032112-180403-0027	4							
2-032112-180503-0028	2							

Case Narrative

Sampling was conducted as per the site-specific Quality Assurance Project Plan (QAPP) and analyzed by the analytical methods stated in the QAPP. The laboratory reported the data to three significant figures. Any other representation of the data is the responsibility of the user. All data validation flags have been inserted into the results tables.

REPORT OF LABORATORY ANALYSIS

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TO-15 (VOC) in Air Package X 044

Due to insufficient sample volume, sample 0-130-1130 was pressurized to obtain a representative sample for analysis. This pressurization elevated the reporting limits (RLs) above the project-specified RLs.

The trip blank (0-130-1142) contained benzene, toluene, ethyl benzene and 1,2,4,-trimethylbenzene above the reporting limit (RL). The following compounds are qualified as non-detect (U) and their RLs have been elevated to the concentration found in the samples as follows:

- Benzene: 0-130-1159, -1058, -1061, -1063, -1069, -1091, -1093, -1130, -1133, -1135 and -1138.
- Toluene: 0-130-1159, -1058, -1063, -1065, -1067, -1069, -1091, -1093, -1133, -1135 and -1138.
- Ethyl Benzene: 0-130-1069, -1093, -1133 and -1135.
- 1,2,4-Trimethylbenzene: 0-130-1063, -1065, -1067, -1069, -1091, -1133 and -1135.

The results presented in this report only relate to the samples analyzed. All results are intended to be considered in their entirety. The Environmental Response Team/Scientific, Engineering, Response and Analytical Services laboratory is not responsible for utilization of less than the complete report.

REPORT OF LABORATORY ANALYSIS

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Summary of Abbreviations

BFB	Bromofluorobenzene
C	Centigrade
CLP	Contract Laboratory Program
COC	Chain of Custody
conc	concentration
cont	continued
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
D	(Surrogate Table) value is from a diluted sample and was not calculated
Dioxin	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/MS	Gas Chromatography/ Mass Spectrometry
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MS (BS)	Matrix Spike (Blank Spike)
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
NS	Not Spiked
% D	Percent Difference
% REC	Percent Recovery
SOP	Standard Operating Procedure
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
PQL	Practical Quantitation Limit
PAL	Performance Acceptance Limit
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
SERAS	Scientific, Engineering, Response and Analytical Services
SIM	Selected Ion Monitoring
Sur	Surrogate
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m ³	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	s	sigma

Data Validation Flags

J	Value is estimated	R	Value is unusable
J+	Value is estimated high (metals only)	U	Not detected
J-	Value is estimated low (metals only)	UJ	Not detected and RL is estimated
N	Presumptively present (Aroclors only)		

Rev. 1/14/09



Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number		R203016-17		R203016-29		R203016-32		R203016-35
Sample Number	3/27/2012	0-130-1159		0-130-1171		0-130-1174		0-130-1058
Sample Location	Method Blank	I12-SS		J1-SS		J2-SS		MHS-SS1
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300	U	0.0698	U	0.0698	0.0728	0.0698
1,1-Dichloroethene	U	0.0300	U	0.0698	U	0.0698	U	0.0698
Methylene Chloride	U	0.0300	U	0.0698	0.0757	0.0698	0.148	0.0698
trans-1,2-Dichloroethene	U	0.0300	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0300	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0300	U	0.0698	U	0.0698	U	0.0698
Chloroform	U	0.0300	0.636	0.0698	U	0.0698	0.119	0.0698
1,2-Dichloroethane	U	0.0300	U	0.0698	U	0.0698	U	0.0698
Benzene	U	0.0300	U	0.137	1.51	0.0698	1.87	0.0698
Trichloroethene	U	0.0300	U	0.0698	0.104	0.0698	U	0.0698
Toluene	U	0.0300	U	0.785	3.66	0.0698	15.4	0.0698
Tetrachloroethene	U	0.0300	0.746	0.0698	60.3	0.300	29.1	0.0698
Ethylbenzene	U	0.0300	0.192	0.0698	0.375	0.0698	1.11	0.0698
1,2,4-Trimethylbenzene	U	0.0300	0.333	0.0698	0.479	0.0698	3.27	0.0698

Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-38	R203016-40	R203016-42	R203016-44	R203016-46			
Sample Number	0-130-1061	0-130-1063	0-130-1065	0-130-1067	0-130-1069			
Sample Location	MHS-SS2	MHS-SS3	MHS-SS4	MHS-SS5	MHS-SS6			
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Methylene Chloride	U	0.0698	0.119	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Chloroform	U	0.0698	U	0.0698	U	0.0698	0.145	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Benzene	U	0.264	U	0.192	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Toluene	3.49	0.0698	U	0.696	U	0.798	U	1.24
Tetrachloroethene	U	0.0698	U	0.0698	0.0722	0.0698	0.244	0.0698
Ethylbenzene	0.447	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2,4-Trimethylbenzene	1.46	0.0698	U	0.143	U	0.140	U	0.203

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Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number	R203016-48	R203016-68	R203016-70	R203016-72
Sample Number	0-130-1071	0-130-1091	0-130-1093	0-130-1095
Sample Location	MHS-SS7	FH-SS	44A-SS	44B-SS
<hr/>				
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698
Methylene Chloride	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698
Chloroform	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698
Benzene	U	0.0698	U	0.126
Trichloroethene	U	0.0698	0.0868	0.0698
Toluene	2.37	0.0698	U	0.832
Tetrachloroethene	U	0.0698	1.07	0.0698
Ethylbenzene	U	0.0698	0.162	0.0698
1,2,4-Trimethylbenzene	0.151	0.0698	U	0.206
			0.245	0.0698
				0.275
				0.0698

Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-01	R203016-03	R203016-05	R203016-07	R203016-10
Sample Number	0-130-1143	0-130-1145	0-130-1147	0-130-1149	0-130-1152
Sample Location	PFCS-SS1	PFCS-SS2	PFCS-SS3	PFCS-SS4	PFCS-SS5
<hr/>					
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv
Vinyl Chloride	U	0.0698	U	0.0698	U
1,1-Dichloroethene	U	0.0698	U	0.0698	U
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U
1,1-Dichloroethane	U	0.0698	U	0.0698	U
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U
1,2-Dichloroethane	U	0.0698	U	0.0698	U
Trichloroethene	U	0.0698	0.328	0.0698	U
Tetrachloroethene	U	0.0698	0.233	0.0698	0.0978
				0.0698	0.0698
					1.03
					0.0698

Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-12	R203016-14	R203016-19	R203016-22	R203016-24
Sample Number	0-130-1154	0-130-1156	0-130-1161	0-130-1164	0-130-1166
Sample Location	PFCS-SS6	PFCS-SS7	15CX-SS	115ACX-SS	13CX-SS
<hr/>					
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv
Vinyl Chloride	U	0.0698	U	0.0698	U
1,1-Dichloroethene	U	0.0698	U	0.0698	U
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U
1,1-Dichloroethane	U	0.0698	U	0.0698	U
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U
1,2-Dichloroethane	U	0.0698	U	0.0698	U
Trichloroethene	U	0.0698	U	0.0698	U
Tetrachloroethene	1.24	0.0698	0.122	0.0698	0.250
				0.0698	0.235
					0.0981
					0.0698

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Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number	R203016-26	R203016-52	R203016-54	R203016-56	R203016-58
Sample Number	0-130-1168	0-130-1075	0-130-1077	0-130-1079	0-130-1081
Sample Location	CX6-SS	CSA-SS1	CSA-SS2	CSA-SS3	CSA-SS4
<hr/>					
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv
Vinyl Chloride	U	0.0698	U	0.0698	U
1,1-Dichloroethene	U	0.0698	U	0.0698	U
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U
1,1-Dichloroethane	U	0.0698	U	0.0698	U
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U
1,2-Dichloroethane	U	0.0698	U	0.0698	U
Trichloroethene	0.414	0.0698	U	0.0698	U
Tetrachloroethene	3.00	0.0698	0.172	0.0698	0.195
					0.107
					0.0698

Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-62	R203016-64
Sample Number	0-130-1085	0-130-1087
Sample Location	CSA-SS6	CSA-SS7
<hr/>		
Analyte	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698
1,1-Dichloroethene	U	0.0698
trans-1,2-Dichloroethene	U	0.0698
1,1-Dichloroethane	U	0.0698
cis-1,2-Dichloroethene	0.134	0.0698
1,2-Dichloroethane	U	0.0698
Trichloroethene	U	0.0698
Tetrachloroethene	U	0.0698
		0.235
		0.0698

Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	3/28/2012	R203017-09	R203017-11	R203017-14	R203017-16
Sample Number	Method Blank	0-130-1128	0-130-1130	0-130-1133	0-130-1135
Sample Location	I15-SS	J3-SS	J4-SS	L-SS	
<hr/>					
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv
Vinyl Chloride	U	0.0698	U	0.0698	U
1,1-Dichloroethene	U	0.0698	U	0.0698	U
Methylene Chloride	U	0.0698	0.125	0.0698	0.0758
trans-1,2-Dichloroethene	U	0.0698	U	0.0829	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0829	U
cis-1,2-Dichloroethene	U	0.0698	U	0.0829	U
Chloroform	U	0.0698	0.746	0.0698	4.81
1,2-Dichloroethane	U	0.0698	U	0.0829	0.164
Benzene	U	0.0698	1.47	0.0698	0.0698
Trichloroethene	U	0.0698	U	0.0829	U
Toluene	U	0.0698	5.45	0.0698	7.05
Tetrachloroethene	U	0.0698	0.402	0.0698	5.98
Ethylbenzene	U	0.0698	1.11	0.0698	0.875
1,2,4-Trimethylbenzene	U	0.0698	0.535	0.0698	1.51
					0.0749
					0.0749

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Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number	R203017-19	R203017-21
Sample Number	0-130-1138	0-130-1140
Sample Location	PS-SS1	PS-SS2

Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698
Methylene Chloride	U	0.0698	0.107	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698
Chloroform	U	0.0698	3.08	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698
Benzene	U	0.0751	0.943	0.0698
Trichloroethene	U	0.0698	0.0925	0.0698
Toluene	U	0.700	4.55	0.0698
Tetrachloroethene	U	0.0698	0.270	0.0698
Ethylbenzene	U	0.0698	0.625	0.0698
1,2,4-Trimethylbenzene	U	0.0698	1.29	0.0698

Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-60	R203016-74	R203016-76	R203016-78	R203016-81
Sample Number	0-130-1083	0-130-1097	0-130-1099	0-130-1101	0-130-1104
Sample Location	CSA-SS5	NC-SS	53DC-SS	10AF-SS	12AF-SS

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698								
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
cis-1,2-Dichloroethene	U	0.0698								
1,2-Dichloroethane	U	0.0698								
Trichloroethene	U	0.0698								
Tetrachloroethene	0.388	0.0698	U	0.0698	9.96	0.0698	0.139	0.0698	0.253	0.0698

Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-83	R203016-86	R203016-88	R203016-90	R203016-92
Sample Number	0-130-1106	0-130-1109	0-130-1111	0-130-1113	0-130-1115
Sample Location	3AF-SS	52H-SS	8AF-SS	55H-SS	53H-SS

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698								
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	0.369	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698								
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	0.521	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.278	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	0.498	0.0698	0.0850	0.0698
Tetrachloroethene	1.76	0.0698	0.188	0.0698	0.292	0.0698	0.380	0.0698	0.123	0.0698

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Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number	R203016-94	R203016-96	R203017-02	R203017-04	R203017-07			
Sample Number	0-130-1117	0-130-1119	0-130-1121	0-130-1123	0-130-1126			
Sample Location	53C-SS	49C-SS	51C-SS	46C-SS	50H-SS			
<hr/>								
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv			
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	0.488	0.0698	0.336	0.0698	16.1	0.0698	0.0888	0.0698
							0.121	0.0698

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Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number		R203016-17	R203016-29	R203016-32	R203016-35					
Sample Number	3/27/2012	0-130-1159	0-130-1171	0-130-1174	0-130-1058					
Sample Location	Method Blank	I12-SS	J1-SS	J2-SS	MHS-SS1					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767	U	0.178	U	0.178	0.186	0.178	U	0.178
1,1-Dichloroethene	U	0.119	U	0.277	U	0.277	U	0.277	U	0.277
Methylene Chloride	U	0.104	U	0.242	0.263	0.242	0.515	0.242	U	0.242
trans-1,2-Dichloroethene	U	0.119	U	0.277	U	0.277	U	0.277	U	0.277
1,1-Dichloroethane	U	0.121	U	0.282	U	0.282	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.119	U	0.277	U	0.277	U	0.277	U	0.277
Chloroform	U	0.146	3.11	0.341	U	0.341	0.580	0.341	U	0.341
1,2-Dichloroethane	U	0.121	U	0.282	U	0.282	U	0.282	U	0.282
Benzene	U	0.0958	U	0.437	4.84	0.223	5.99	0.223	U	0.831
Trichloroethene	U	0.161	U	0.375	0.560	0.375	U	0.375	U	0.375
Toluene	U	0.113	U	2.96	13.8	0.263	57.9	0.263	U	6.53
Tetrachloroethene	U	0.203	5.06	0.473	409	2.03	198	0.473	U	0.473
Ethylbenzene	U	0.130	0.834	0.303	1.63	0.303	4.80	0.303	0.775	0.303
1,2,4-Trimethylbenzene	U	0.147	1.64	0.343	2.35	0.343	16.1	0.343	1.78	0.343

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-38	R203016-40	R203016-42	R203016-44	R203016-46					
Sample Number	0-130-1061	0-130-1063	0-130-1065	0-130-1067	0-130-1069					
Sample Location	MHS-SS2	MHS-SS3	MHS-SS4	MHS-SS5	MHS-SS6					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
Methylene Chloride	U	0.242	0.413	0.242	U	0.242	U	0.242	U	0.242
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
Chloroform	U	0.341	U	0.341	U	0.341	0.707	0.341	U	0.341
1,2-Dichloroethane	U	0.282								
Benzene	U	0.844	U	0.614	U	0.223	U	0.223	U	0.435
Trichloroethene	U	0.375								
Toluene	13.1	0.263	U	2.62	U	3.01	U	4.66	U	4.48
Tetrachloroethene	U	0.473	U	0.473	0.490	0.473	1.66	0.473	1.50	0.473
Ethylbenzene	1.94	0.303	U	0.303	U	0.303	U	0.303	U	0.382
1,2,4-Trimethylbenzene	7.19	0.343	U	0.704	U	0.687	U	0.998	U	1.08

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Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number	R203016-48	R203016-68	R203016-70	R203016-72
Sample Number	0-130-1071	0-130-1091	0-130-1093	0-130-1095
Sample Location	MHS-SS7	FH-SS	44A-SS	44B-SS
<hr/>				
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277
Methylene Chloride	U	0.242	U	0.242
trans-1,2-Dichloroethene	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277
Chloroform	U	0.341	U	0.341
1,2-Dichloroethane	U	0.282	U	0.282
Benzene	U	0.223	U	0.403
Trichloroethene	U	0.375	0.467	0.375
Toluene	8.93	0.263	U	3.14
Tetrachloroethene	U	0.473	7.25	0.473
Ethylbenzene	U	0.303	0.703	0.303
1,2,4-Trimethylbenzene	0.744	0.343	U	1.01
			1.20	0.343
				1.35
				0.343

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-01	R203016-03	R203016-05	R203016-07	R203016-10
Sample Number	0-130-1143	0-130-1145	0-130-1147	0-130-1149	0-130-1152
Sample Location	PFCS-SS1	PFCS-SS2	PFCS-SS3	PFCS-SS4	PFCS-SS5
<hr/>					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178	U
1,1-Dichloroethene	U	0.277	U	0.277	U
trans-1,2-Dichloroethene	U	0.277	U	0.277	U
1,1-Dichloroethane	U	0.282	U	0.282	U
cis-1,2-Dichloroethene	U	0.277	U	0.277	U
1,2-Dichloroethane	U	0.282	U	0.282	U
Trichloroethene	U	0.375	1.76	0.375	U
Tetrachloroethene	U	0.473	1.58	0.473	0.663
				0.473	0.473
					6.99
					0.473

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-12	R203016-14	R203016-19	R203016-22	R203016-24
Sample Number	0-130-1154	0-130-1156	0-130-1161	0-130-1164	0-130-1166
Sample Location	PFCS-SS6	PFCS-SS7	15CX-SS	115ACX-SS	13CX-SS
<hr/>					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178	U
1,1-Dichloroethene	U	0.277	U	0.277	U
trans-1,2-Dichloroethene	U	0.277	U	0.277	U
1,1-Dichloroethane	U	0.282	U	0.282	U
cis-1,2-Dichloroethene	U	0.277	U	0.277	U
1,2-Dichloroethane	U	0.282	U	0.282	U
Trichloroethene	U	0.375	U	0.375	U
Tetrachloroethene	8.38	0.473	0.828	0.473	1.70
				0.473	1.59
					0.473
					0.665
					0.473

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Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number	R203016-26	R203016-52	R203016-54	R203016-56	R203016-58
Sample Number	0-130-1168	0-130-1075	0-130-1077	0-130-1079	0-130-1081
Sample Location	CX6-SS	CSA-SS1	CSA-SS2	CSA-SS3	CSA-SS4
<hr/>					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178	U
1,1-Dichloroethene	U	0.277	U	0.277	U
trans-1,2-Dichloroethene	U	0.277	U	0.277	U
1,1-Dichloroethane	U	0.282	U	0.282	U
cis-1,2-Dichloroethene	U	0.277	U	0.277	U
1,2-Dichloroethane	U	0.282	U	0.282	U
Trichloroethene	2.22	0.375	U	0.375	U
Tetrachloroethene	20.4	0.473	1.17	0.473	1.32
					0.473
					0.727
					0.473

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-62	R203016-64
Sample Number	0-130-1085	0-130-1087
Sample Location	CSA-SS6	CSA-SS7

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277
trans-1,2-Dichloroethene	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282
cis-1,2-Dichloroethene	0.531	0.277	U	0.277
1,2-Dichloroethane	U	0.282	U	0.282
Trichloroethene	U	0.375	U	0.375
Tetrachloroethene	U	0.473	1.59	0.473

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203017-09		R203017-11		R203017-14		R203017-16	
Sample Number	3/28/2012	0-130-1128	I15-SS	0-130-1130	J3-SS	0-130-1133	J4-SS	0-130-1135
Sample Location	Method Blank							L-SS
<hr/>								
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178	U	0.212	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277	U	0.329	U	0.277
Methylene Chloride	U	0.242	0.436	0.242	0.495	0.288	0.263	0.242
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.329	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282	U	0.335	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.329	U	0.277
Chloroform	U	0.341	3.64	0.341	23.5	0.405	0.799	0.341
1,2-Dichloroethane	U	0.282	U	0.282	U	0.335	U	0.282
Benzene	U	0.223	4.68	0.223	U	2.32	U	0.714
Trichloroethene	U	0.375	U	0.375	U	0.445	U	0.375
Toluene	U	0.263	20.5	0.263	26.6	0.312	U	3.98
Tetrachloroethene	U	0.473	2.73	0.473	40.6	0.562	1.70	0.473
Ethylbenzene	U	0.303	4.82	0.303	3.80	0.360	U	0.387
1,2,4-Trimethylbenzene	U	0.343	2.63	0.343	7.40	0.407	U	0.368

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Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number	R203017-19	R203017-21
Sample Number	0-130-1138	0-130-1140
Sample Location	PS-SS1	PS-SS2

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277
Methylene Chloride	U	0.242	0.370	0.242
trans-1,2-Dichloroethene	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277
Chloroform	U	0.341	15.0	0.341
1,2-Dichloroethane	U	0.282	U	0.282
Benzene	U	0.240	3.01	0.223
Trichloroethene	U	0.375	0.497	0.375
Toluene	U	2.64	17.2	0.263
Tetrachloroethene	U	0.473	1.83	0.473
Ethylbenzene	U	0.303	2.71	0.303
1,2,4-Trimethylbenzene	U	0.343	6.35	0.343

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-60	R203016-74	R203016-76	R203016-78	R203016-81
Sample Number	0-130-1083	0-130-1097	0-130-1099	0-130-1101	0-130-1104
Sample Location	CSA-SS5	NC-SS	53DC-SS	10AF-SS	12AF-SS

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282								
Trichloroethene	U	0.375								
Tetrachloroethene	2.63	0.473	U	0.473	67.6	0.473	0.942	0.473	1.71	0.473

Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

SERAS Sample Number	R203016-83	R203016-86	R203016-88	R203016-90	R203016-92
Sample Number	0-130-1106	0-130-1109	0-130-1111	0-130-1113	0-130-1115
Sample Location	3AF-SS	52H-SS	8AF-SS	55H-SS	53H-SS

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	1.46	0.277	U	0.277
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	2.07	0.277	U	0.277
1,2-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282	1.13	0.282
Trichloroethene	U	0.375	U	0.375	U	0.375	2.68	0.375	0.457	0.375
Tetrachloroethene	11.9	0.473	1.28	0.473	1.98	0.473	2.58	0.473	0.831	0.473

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Table 1.1b (cont) Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method: SERAS SOP#1814

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SERAS Sample Number	R203016-94	R203016-96	R203017-02	R203017-04	R203017-07			
Sample Number	0-130-1117	0-130-1119	0-130-1121	0-130-1123	0-130-1126			
Sample Location	53C-SS	49C-SS	51C-SS	46C-SS	50H-SS			
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277
1,2-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282
Trichloroethylene	U	0.375	U	0.375	U	0.375	U	0.375
Tetrachloroethylene	3.31	0.473	2.28	0.473	109	0.473	0.602	0.473
							0.823	0.473

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Table 2.1 Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

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Sample ID: LCS 03/27/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.03	0.763	74	53 - 130
1,1-Dichloroethene	1.05	0.783	75	49 - 128
Methylene Chloride	1.05	0.812	77	35 - 134
trans-1,2-Dichloroethene	1.05	0.761	73	62 - 123
1,1-Dichloroethane	1.05	0.807	77	64 - 133
cis-1,2-Dichloroethene	1.05	0.795	76	61 - 129
Chloroform	1.02	0.751	74	62 - 141
1,2-Dichloroethane	1.05	0.853	81	59 - 139
Benzene	1.05	1.01	96	62 - 123
Trichloroethene	1.04	0.871	84	72 - 133
Toluene	1.05	0.951	91	64 - 133
Tetrachloroethene	1.04	0.756	73	66 - 138
Ethylbenzene	1.06	0.995	94	61 - 139
1,2,4-Trimethylbenzene	1.04	0.873	84	24 - 131

Sample ID: LCS 03/28/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.03	0.818	79	53 - 130
1,1-Dichloroethene	1.05	0.854	81	49 - 128
Methylene Chloride	1.05	0.872	83	35 - 134
trans-1,2-Dichloroethene	1.05	0.843	80	62 - 123
1,1-Dichloroethane	1.05	0.879	84	64 - 133
cis-1,2-Dichloroethene	1.05	0.864	82	61 - 129
Chloroform	1.02	0.832	82	62 - 141
1,2-Dichloroethane	1.05	0.932	89	59 - 139
Benzene	1.05	1.06	101	62 - 123
Trichloroethene	1.04	0.947	91	72 - 133
Toluene	1.05	1.01	96	64 - 133
Tetrachloroethene	1.04	0.807	78	66 - 138
Ethylbenzene	1.06	1.06	100	61 - 139
1,2,4-Trimethylbenzene	1.04	0.893	86	24 - 131

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

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Sample ID: LCS 03/28/12

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.03	0.789	77	53 - 130
1,1-Dichloroethene	1.05	0.814	78	49 - 128
Methylene Chloride	1.05	0.845	81	35 - 134
trans-1,2-Dichloroethene	1.05	0.810	77	62 - 123
1,1-Dichloroethane	1.05	0.844	80	64 - 133
cis-1,2-Dichloroethene	1.05	0.831	79	61 - 129
Chloroform	1.02	0.796	78	62 - 141
1,2-Dichloroethane	1.05	0.913	87	59 - 139
Benzene	1.05	1.01	96	62 - 123
Trichloroethene	1.04	0.890	86	72 - 133
Toluene	1.05	0.993	95	64 - 133
Tetrachloroethene	1.04	0.784	75	66 - 138
Ethylbenzene	1.06	1.04	98	61 - 139
1,2,4-Trimethylbenzene	1.04	0.923	89	24 - 131

Sample ID: LCS 03/29/12

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Vinyl Chloride	1.03	0.843	82	53 - 130
1,1-Dichloroethene	1.05	0.893	85	49 - 128
Methylene Chloride	1.05	0.909	87	35 - 134
trans-1,2-Dichloroethene	1.05	0.881	84	62 - 123
1,1-Dichloroethane	1.05	0.935	89	64 - 133
cis-1,2-Dichloroethene	1.05	0.905	86	61 - 129
Chloroform	1.02	0.878	86	62 - 141
1,2-Dichloroethane	1.05	0.994	95	59 - 139
Benzene	1.05	1.13	108	62 - 123
Trichloroethene	1.04	0.976	94	72 - 133
Toluene	1.05	1.06	101	64 - 133
Tetrachloroethene	1.04	0.824	79	66 - 138
Ethylbenzene	1.06	1.11	105	61 - 139
1,2,4-Trimethylbenzene	1.04	1.16	112	24 - 131

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Table 2.2 Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Page 1 of 2

Sample ID: 0-130-1058

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Chloroform	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Benzene	0.260	0.275	6	≤25
Trichloroethene	U	U	NC	≤25
Toluene	1.73	1.88	8	≤25
Tetrachloroethene	U	U	NC	≤25
Ethylbenzene	0.178	0.186	4	≤25
1,2,4-Trimethylbenzene	0.362	0.416	14	≤25

Sample ID: 0-130-1061

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Chloroform	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Benzene	0.264	0.267	1	≤25
Trichloroethene	U	U	NC	≤25
Toluene	3.49	3.60	3	≤25
Tetrachloroethene	U	0.0759	NC	≤25
Ethylbenzene	0.447	0.458	2	≤25
1,2,4-Trimethylbenzene	1.46	1.53	5	≤25

Sample ID: 0-130-1063

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.119	0.122	2	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Chloroform	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Benzene	0.192	0.172	10	≤25
Trichloroethene	U	U	NC	≤25
Toluene	0.696	0.644	8	≤25
Tetrachloroethene	U	U	NC	≤25
Ethylbenzene	U	U	NC	≤25
1,2,4-Trimethylbenzene	0.143	0.118	20	≤25

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Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

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Sample ID: 0-130-1065

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Chloroform	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Benzene	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Toluene	0.798	0.893	10	≤25
Tetrachloroethene	0.0722	0.0782	8	≤25
Ethylbenzene	U	U	NC	≤25
1,2,4-Trimethylbenzene	0.140	0.155	10	≤25

Sample ID: 0-130-1097

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25

Sample ID: 0-130-1099

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	9.96	10.2	2	≤25

REPORT OF LABORATORY ANALYSIS

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USEPA

DataShi

DateShipped: 3/1/2012
CarrierName: FedEx
AirbillNo: 89945869218105 3/2/12
WMT# F203016

Airbill INC

1-1007

ABSTRACT

AirbillNG

Airbill No

Ausbildung

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-171616-0015

Cooler #: 1

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Date	Stop_Time
01	0-130-1143	PFCS-SS1	TCE, PCE plus 6	Soil Gas	1	SUMMA	14240	14007	-30	-6	3/21/2012	8:34:00 AM
02	0-130-1144	PFCS-IA1	TCE, PCE plus 6	Air	1	SUMMA	115	14029	-30	-2	3/21/2012	8:34:00 AM
03	0-130-1145	PFCS-SS2	TCE, PCE plus 6	Soil Gas	1	SUMMA	14230	13780 14238 3/21/12	-30	-6.5	3/21/2012	8:38:00 AM
04	0-130-1146	PFCS-IA2	TCE, PCE plus 6	Air	1	SUMMA	19	13799	-30	-1.5	3/21/2012	8:38:00 AM
05	0-130-1147	PFCS-SS3	TCE, PCE plus 6	Soil Gas	1	SUMMA	138	13913	-30	-6.5	3/21/2012	8:44:00 AM
06	0-130-1148	PFCS-IA3	TCE, PCE plus 6	Air	1	SUMMA	111	13908	-30	-2.5	3/21/2012	8:44:00 AM
07	0-130-1149	PFCS-SS4	TCE, PCE plus 6	Soil Gas	1	SUMMA	195	14032	-30	-6	3/21/2012	8:48:00 AM
08	0-130-1150	PFCS-IA4	TCE, PCE plus 6	Air	1	SUMMA	223	13906	-30	-3	3/21/2012	8:48:00 AM
09	0-130-1151	PFCS-IA5	TCE, PCE plus 6	Air	1	SUMMA	1138	13990	-30	-2.5	3/21/2012	8:48:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

018

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-174259-0016

Cooler #: 1

Lab: SERAS

W# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop Time
10	0-130-1152	PFCS-SS5	TCE, PCE plus 6	Soil Gas	1	SUMMA	104	13923	-30	-11.5	3/21/2012 8:54:00 AM
11	0-130-1153	PFCS-IA6	TCE, PCE plus 6	Air	1	SUMMA	184	13766	-30	-3	3/21/2012 8:54:00 AM
12	0-130-1154	PFCS-SS6	TCE, PCE plus 6	Soil Gas	1	SUMMA	24	13929	-30	-6	3/21/2012 9:04:00 AM
13	0-130-1155	PFCS-IA7	TCE, PCE plus 6	Air	1	SUMMA	11508	13911	-30	-3	3/21/2012 9:04:00 AM
14	0-130-1156	PFCS-SS7	TCE, PCE plus 6	Soil Gas	1	SUMMA	241	13936	-30	-7.5	3/21/2012 8:59:00 AM
15	0-130-1157	PFCS-IA8	TCE, PCE plus 6	Air	1	SUMMA	14246	13761	-30	-2.5	3/21/2012 8:59:00 AM
16	0-130-1158	PFCS-AMB	TCE, PCE plus 6	Air	1	SUMMA	22	13781	-30	-2.5	3/21/2012 9:07:00 AM
17	0-130-1159	I12-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	12625	13789	-30	-6	3/21/2012 12:05:00 PM
18	0-130-1160	I12-IA	TCE, PCE plus 12	Air	1	SUMMA	200	14016	-30	-5	3/21/2012 12:05:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

610

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-175005-0017

Cooler #: 1

Lab: SERAS

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

WOT# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
19	0-130-1161	15CX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	256	13782	-30	-7	3/21/2012	1:35:00 PM
20	0-130-1162	15CX-IA1	TCE, PCE plus 6	Air	1	SUMMA	14068	14039	-30	-4	3/21/2012	1:35:00 PM
21	0-130-1163	15CX-IA2	TCE, PCE plus 6	Air	1	SUMMA	14072	13790	-30	-5.5	3/21/2012	1:35:00 PM
22	0-130-1164	115ACX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	23	13988	-30	-6	3/21/2012	1:44:00 PM
23	0-130-1165	115ACX-IA	TCE, PCE plus 6	Air	1	SUMMA	53	13775	-30	-6	3/21/2012	1:44:00 PM
24	0-130-1166	13CX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	55	13794	-30	-5	3/21/2012	1:50:00 PM
25	0-130-1167	13CX-IA	TCE, PCE plus 6	Air	1	SUMMA	260	14003	-30	-5.5	3/21/2012	1:50:00 PM
26	0-130-1168	CX6-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	14	14011	-30	-5	3/21/2012	1:57:00 PM
27	0-130-1169	CX6-IA	TCE, PCE plus 6	Air	1	SUMMA	181	14024	-30	-30	3/21/2012	1:57:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #	
	Date	Time

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	PBS	3/21/12	Jung, M.	3/23/12	8:00	All/Analysis	Jung, M.	3/23/12	PBS	3/23/12	11:00

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-175125-0018

Cooler #: 1

Lab: SERAS

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
28	0-130-1170	115ACX-AMB	TCE, PCE plus 6	Air	1	SUMMA	70	13946	-30	-7	3/21/2012	1:44:00 PM
29	0-130-1171	J1-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	226	13939	-30	-7	3/21/2012	2:21:00 PM
30	0-130-1172	J1-IA1	TCE, PCE plus 12	Air	1	SUMMA	170	14034	-30	-5	3/21/2012	2:21:00 PM
31	0-130-1173	J1-IA2	TCE, PCE plus 12	Air	1	SUMMA	14223	14021	-30	-30	3/21/2012	2:21:00 PM
32	0-130-1174	J2-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	215	13934	-30	-5.5	3/21/2012	3:06:00 PM
33	0-130-1175	J2-IA	TCE, PCE plus 12	Air	1	SUMMA	71	14048	-30	-6	3/21/2012	3:06:00 PM
34	0-130-1176	J2-AMB	TCE, PCE plus 12	Air	1	SUMMA	81	13788	-30	-6	3/21/2012	3:06:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ANALYSIS	PLB	3/23/12	Michael Cartwright	3/23/12	8:00	ANALYSIS	Michael Cartwright	3/23/12	PLB	3/23/12	11:00

CHAIN OF CUSTODY RECORD

No: 2-032112-175226-0019

Cooler #: 1
Lab. SERAS

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

WOT# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
35	0-130-1058	MHS-SS1	TCE, PCE plus 12	Soil Gas	1	SUMMA	219	13928	-30	-2.5	3/21/2012	8:20:00 AM
36	0-130-1059	MHS-IA1	TCE, PCE plus 12	Air	1	SUMMA	261	14005	-30	-1.5	3/21/2012	8:20:00 AM
37	0-130-1060	MHS-IA2	TCE, PCE plus 12	Air	1	SUMMA	14218	13787	-30	-6	3/21/2012	8:20:00 AM
38	0-130-1061	MHS-SS2	TCE, PCE plus 12	Soil Gas	1	SUMMA	12	13914	-30	-0.5	3/21/2012	8:26:00 AM
39	0-130-1062	MHS-IA3	TCE, PCE plus 12	Air	1	SUMMA	173	13782 B982 B1011tr	-30	-0.5	3/21/2012	8:26:00 AM
40	0-130-1063	MHS-SS3	TCE, PCE plus 12	Soil Gas	1	SUMMA	193	13916	-30	-2.5	3/21/2012	8:33:00 AM
41	0-130-1064	MHS-IA4	TCE, PCE plus 12	Air	1	SUMMA	209	14001	-30	-8	3/21/2012	8:33:00 AM
42	0-130-1065	MHS-SS4	TCE, PCE plus 12	Soil Gas	1	SUMMA	57	14041	-30	-0.5	3/21/2012	8:38:00 AM
43	0-130-1066	MHS-IA5	TCE, PCE plus 12	Air	1	SUMMA	231	14019	-30	-2	3/21/2012	8:38:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Acq/analyt, FB	FB	3/21/12	Tony Harris	3/23/12	8:00	All/Analysis	Tony Harris	3/23/12	FB	3/23/12	1:00

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-175316-0020

Cooler #: 1

Lab: SERAS

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
44	0-130-1067	MHS-SS5	TCE, PCE plus 12	Soil Gas	1	SUMMA	257	13790	-30	-3.5	3/21/2012	8:43:00 AM
45	0-130-1068	MHS-IA6	TCE, PCE plus 12	Air	1	SUMMA	66	13953	-30	-4	3/21/2012	8:43:00 AM
46	0-130-1069	MHS-SS6	TCE, PCE plus 12	Soil Gas	1	SUMMA	14069	13921	-30	-3	3/21/2012	8:52:00 AM
47	0-130-1070	MHS-IA7	TCE, PCE plus 12	Air	1	SUMMA	179	13798	-30	-4.5	3/21/2012	8:52:00 AM
48	0-130-1071	MHS-SS7	TCE, PCE plus 12	Soil Gas	1	SUMMA	224	14037	-30	-1	3/21/2012	8:48:00 AM
49	0-130-1072	MHS-IA8	TCE, PCE plus 12	Air	1	SUMMA	26	13960	-30	-1.5	3/21/2012	8:48:00 AM
50	0-130-1073	MHS-AMB1	TCE, PCE plus 12	Air	1	SUMMA	148	14015	-30	-2	3/21/2012	9:01:00 AM
51	0-130-1074	MHS-AMB2	TCE, PCE plus 12	Air	1	SUMMA	239	13942	-30	-2	3/21/2012	9:05:00 AM
52	0-130-1075	CSA-SS1	TCE, PCE plus 6	Soil Gas	1	SUMMA	263	13933	-30	-4	3/21/2012	9:35:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
An/Analysis	H. J. Carter	3/21/12	Jerry Morris	3/23/12	8:00	An/Analysis	Jerry Morris	3/23/12	H. J. Carter	3/28/12	11:00

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-175435-0021

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WOTR203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
53	0-130-1076	CSA-IA1	TCE, PCE plus 6	Air	1	SUMMA	5	13784	-30	-7	3/21/2012	9:35:00 AM
54	0-130-1077	CSA-SS2	TCE, PCE plus 6	Soil Gas	1	SUMMA	152	13948	-30	-3.5	3/21/2012	9:39:00 AM
55	0-130-1078	CSA-IA2	TCE, PCE plus 6	Air	1	SUMMA	178	13802	-30	-3	3/21/2012	9:39:00 AM
56	0-130-1079	CSA-SS3	TCE, PCE plus 6	Soil Gas	1	SUMMA	1131	14004	-30	-1	3/21/2012	9:44:00 AM
57	0-130-1080	CSA-IA3	TCE, PCE plus 6	Air	1	SUMMA	68	14020	-30	-3	3/21/2012	9:44:00 AM
58	0-130-1081	CSA-SS4	TCE, PCE plus 6	Soil Gas	1	SUMMA	79	14035	-30	-3	3/21/2012	9:52:00 AM
59	0-130-1082	CSA-IA4	TCE, PCE plus 6	Air	1	SUMMA	147	13912	-30	-0.5	3/21/2012	9:52:00 AM
60	0-130-1083	CSA-SS5	TCE, PCE plus 6	Soil Gas	1	SUMMA	34	13785	-30	-2	3/21/2012	9:57:00 AM
61	0-130-1084	CSA-IA5	TCE, PCE plus 6	Air	1	SUMMA	37	13795	-30	-3.5	3/21/2012	9:57:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Analysis	PSL	3/21/12	Tony Martin	3/23/12	8:00	Analysis	Tony Martin	3/23/12	PSL	3/23/12	11:00

CHAIN OF CUSTODY RECORD

No: 2-032112-175708-0022

Cooler #: 1

Lab: SERAS

WO#R203016

Contact Name: Michael Cartwright
Contact Phone: 732-321-4284

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
62	0-130-1085	CSA-SS6	TCE, PCE plus 6	Soil Gas	1	SUMMA	213	13922	-30	-3	3/21/2012	10:02:00 AM
63	0-130-1086	CSA-IA6	TCE, PCE plus 6	Air	1	SUMMA	137	13776	-30	-3	3/21/2012	10:02:00 AM
64	0-130-1087	CSA-SS7	TCE, PCE plus 6	Soil Gas	1	SUMMA	159	14050	-30	-2.5	3/21/2012	10:07:00 AM
65	0-130-1088	CSA-IA7	TCE, PCE plus 6	Air	1	SUMMA	75	13777	-30	-3	3/21/2012	10:07:00 AM
66	0-130-1089	CSA-IA8	TCE, PCE plus 6	Air	1	SUMMA	242	13943	-30	-1	3/21/2012	10:07:00 AM
67	0-130-1090	CSA-AMB	TCE, PCE plus 6	Air	1	SUMMA	238	13765	-30	-3	3/21/2012	9:48:00 AM
68	0-130-1091	FH-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	118	13767	-30	-4	3/21/2012	10:48:00 AM
69	0-130-1092	FH-IA	TCE, PCE plus 12	Air	1	SUMMA	103	13918	-30	-3	3/21/2012	10:48:00 AM
70	0-130-1093	44A-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	186	13937	-30	-3.5	3/21/2012	10:51:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

025

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-175900-0023

Cooler #: 1

Lab: SERAS

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

Woff R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
71	0-130-1094	44A-IA	TCE, PCE plus 12	Air	1	SUMMA	222	14023	-30	-2.5	3/21/2012	10:51:00 AM
72	0-130-1095	44B-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	119	13935	-30	-4.5	3/21/2012	10:56:00 AM
73	0-130-1096	44B-IA	TCE, PCE plus 12	Air	1	SUMMA	47	13764	-30	-2	3/21/2012	10:56:00 AM
74	0-130-1097	NC-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	107	14038	-30	-4.5	3/21/2012	11:09:00 AM
75	0-130-1098	NC-IA	TCE, PCE plus 6	Air	1	SUMMA	206	14012	-30	-3	3/21/2012	11:09:00 AM
76	0-130-1099	53DC-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	157	13991	-30	-4	3/21/2012	11:17:00 AM
77	0-130-1100	53DC-IA	TCE, PCE plus 6	Air	1	SUMMA	43	13793	-30	-8	3/21/2012	11:17:00 AM
78	0-130-1101	10AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	255	13915	-30	-4.5	3/21/2012	11:27:00 AM
79	0-130-1102	10AF-IA	TCE, PCE plus 6	Air	1	SUMMA	59	13986	-30	-3	3/21/2012	11:27:00 AM

PB

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analys	PLB/Sel	3/21/12	Zony Martin	3/23/12	8:00	All/Analys	Zony Martin	3/23/12	PLB	3/23/12	11:00

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180018-0024

Cooler #: 1

Lab: SERAS

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

WOTR203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
80	0-130-1103	10AF-AMB	TCE, PCE plus 6	Air	1	SUMMA	14251	13779	-30	-2.5	3/21/2012	11:27:00 AM
81	0-130-1104	12AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	130	13941	-30	-4	3/21/2012	11:33:00 AM
82	0-130-1105	12AF-IA	TCE, PCE plus 6	Air	1	SUMMA	25	13993	-30	-3.5	3/21/2012	11:33:00 AM
83	0-130-1106	3AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	243	13925	-30	-3.5	3/21/2012	11:43:00 AM
84	0-130-1107	3AF-IA1	TCE, PCE plus 6	Air	1	SUMMA	10	13983	-30	-3	3/21/2012	11:43:00 AM
85	0-130-1108	3AF-IA2	TCE, PCE plus 6	Air	1	SUMMA	191	13996	-30	-2.5	3/21/2012	11:43:00 AM
86	0-130-1109	52H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	63	13778	-30	-3.5	3/21/2012	11:54:00 AM
87	0-130-1110	52H-IA	TCE, PCE plus 6	Air	1	SUMMA	14220	13954	-30	-0.5	3/21/2012	11:54:00 AM
88	0-130-1111	8AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	97	14026	-30	-4	3/21/2012	11:49:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	P.S.H.	3/21/12	Tammy Martin	3/23/12	8:00	All/Analysis	Tammy Martin	3/23/12	T.P.	3/23/12	11:00

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180128-0025

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
89	0-130-1112	8AF-IA	TCE, PCE plus 6	Air	1	SUMMA	156	13792	-30	-3.5	3/21/2012	11:49:00 AM
90	0-130-1113	55H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	65	13762	-30	-4	3/21/2012	12:03:00 PM
91	0-130-1114	55H-IA	TCE, PCE plus 6	Air	1	SUMMA	8	13801	-30	-2.5	3/21/2012	12:03:00 PM
92	0-130-1115	53H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	192	13998 3/21/12	-30	-1	3/21/2012	12:10:00 PM
93	0-130-1116	53H-IA	TCE, PCE plus 6	Air	1	SUMMA	14070	13995 3/21/12	-30	-3	3/21/2012	12:10:00 PM
94	0-130-1117	53C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	7	14010	-30	-4	3/21/2012	3:41:00 PM
95	0-130-1118	53C-IA	TCE, PCE plus 6	Air	1	SUMMA	280	13919	-30	-5	3/21/2012	3:41:00 PM
96	0-130-1119	49C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	203	13952	-30	-5	3/21/2012	1:36:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #
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Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	<i>P.S. Bell</i>	3/21/12	<i>Timmy Martinez</i>	3/23/12	8:00	All/Analysis	<i>Timmy Martinez</i>	3/23/12	<i>P.S. Bell</i>	3/23/12	11:00

USEPA

R203017

WO# R203016 M 3/23/12

CHAIN OF CUSTODY RECORD

No: 2-032112-180247-0026

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

Cooler #: 1

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
01	97M0-130-1120	49C-IA	TCE, PCE plus 6	Air	1	SUMMA	216	14044	-30	-4	3/21/2012	1:36:00 PM
02	98M0-130-1121	51C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	101	13939	-30	-4.5	3/21/2012	1:52:00 PM
03	99M0-130-1122	51C-IA	TCE, PCE plus 6	Air	1	SUMMA	180	13769	-30	-3	3/21/2012	1:52:00 PM
04	0-130-1123	46C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	264	13917	-30	-4.5	3/21/2012	1:45:00 PM
05	0-130-1124	46C-IA1	TCE, PCE plus 6	Air	1	SUMMA	36	13962	-30	-2	3/21/2012	1:45:00 PM
06	0-130-1125	46C-IA2	TCE, PCE plus 6	Air	1	SUMMA	150	13997	-30	-2	3/21/2012	1:45:00 PM
07	0-130-1126	50H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	13	14008	-30	-5	3/21/2012	1:59:00 PM
08	0-130-1127	50H-IA	TCE, PCE plus 6	Air	1	SUMMA	27	14013	-30	-2	3/21/2012	1:59:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM	
	CHAIN OF CUSTODY #	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Per (Analyst) <i>M. Cartwright</i>	<i>M. Cartwright</i>	3/21/12	Per (Analyst) <i>M. Cartwright</i>	3/23/12	8:00	All Analyses	<i>M. Cartwright</i>	3/23/12	<i>M. Cartwright</i>	3/23/12	11:00

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180403-0027

Cabo Rojo

Cooler #: 1

Contact Name: Michael Cartwright

Lab: SERAS

Contact Phone: 732-321-4284

WO# R203017

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
09	0-130-1128	I15-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	40	13920	-30	-4	3/21/2012	2:22:00 PM
10	0-130-1129	I15-IA	TCE, PCE plus 12	Air	1	SUMMA	211	14030	-30	-3.5	3/21/2012	2:22:00 PM
11	0-130-1130	J3-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	176	13949	-30	-27	3/21/2012	2:28:00 PM
12	0-130-1131	J3-IA1	TCE, PCE plus 12	Air	1	SUMMA	182	14040	-30	-4.5	3/21/2012	2:28:00 PM
13	0-130-1132	J3-IA2	TCE, PCE plus 12	Air	1	SUMMA	14224	13768	-30	-29	3/21/2012	2:28:00 PM
14	0-130-1133	J4-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	194	13994	-30	-5.5	3/21/2012	2:36:00 PM
15	0-130-1134	J4-IA	TCE, PCE plus 12	Air	1	SUMMA	274	14018	-30	-4	3/21/2012	2:36:00 PM
16	0-130-1135	L-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	96	13995	-30	-5.5	3/21/2012	2:46:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene	SAMPLES TRANSFERRED FROM	
	CHAIN OF CUSTODY #	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Analyses	Michael Cartwright	3/21/12	Tommy Martinez	3/23/12	8:00	All Analyses	Tommy Martinez	3/23/12	John S.	3/23/12	11:00

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180503-0028

Colder #: 1

Lab: SERAS

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

WO# R203017

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
17	0-130-1136	L-IA	TCE, PCE plus 12	Air	1	SUMMA	139	13985	-30	-4.5	3/21/2012	2:46:00 PM
18	0-130-1137	PS-AMB	TCE, PCE plus 12	Air	1	SUMMA	78	13760	-30	-3.5	3/21/2012	3:00:00 PM
19	0-130-1138	PS-SS1	TCE, PCE plus 12	Soil Gas	1	SUMMA	120	14000	-30	-5	3/21/2012	2:51:00 PM
20	0-130-1139	PS-IA1	TCE, PCE plus 12	Air	1	SUMMA	62	14027	-30	-3	3/21/2012	2:51:00 PM
21	0-130-1140	PS-SS2	TCE, PCE plus 12	Soil Gas	1	SUMMA	32	13947	-30	-5.5	3/21/2012	2:56:00 PM
22	0-130-1141	PS-IA2	TCE, PCE plus 12	Air	1	SUMMA	236	13927	-30	-4.5	3/21/2012	2:56:00 PM
23	0-130-1142	Trip Blank	TCE, PCE plus 12	Air	1	SUMMA	14249	na	-30	-30	3/21/2012	4:36:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Analyses	PMG	3/21/12	Tommy Pachini	3/23/12	8:00	All Analyses	Tommy Pachini	3/23/12	LP	3/23/12	11:00

APPENDIX B
SERAS Air Sampling Worksheets
Cabo Rojo Site
Cabo Rojo, PR
May 2012

ERT/SERAS
Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

Lockheed Martin - SERAS
Edison, NJ

WA: 130
WAM: Jeff Catanzarita
SERAS Contact: Michael
Cartwright

Sample #	0-130-1000	0-130-1001	0-130-1002	0-130-1003	0-130-1004
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	S2A-SS1	S2A-SS2	S2A-SS3	S2A-SS4	S2A-IA1
Media	SUMMA Canister				
Pump #	12	14066	41	14074	226
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	6:29:00 AM	6:31:00 AM	6:32:00 AM	6:33:00 AM	6:34:00 AM
Stop Time	6:28:00 AM	6:28:00 AM	6:29:00 AM	6:30:00 AM	6:28:00 AM
Matrix	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-30	-6	-5	-5	-3
Orifice_ID	13992	13964	13923	14011	14028
Analysis	TO-15 (Chlorinated)				

Sample #	0-130-1005	0-130-1006	0-130-1007	0-130-1008	0-130-1009
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	S2A-IA2	S2B-SS1	S2B-SS2	S2B-SS3	S2B-IA2
Media	SUMMA Canister				
Pump #	128	143	195	227	14072
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	6:38:00 AM	6:58:00 AM	7:00:00 AM	7:01:00 AM	7:02:00 AM
Stop Time	6:35:00 AM	6:42:00 AM	6:43:00 AM	6:44:00 AM	6:43:00 AM
Matrix	Air	Soil Gas	Soil Gas	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-6	-4	-3	-4	-5
Orifice_ID	13933	13776	14042	14043	13948
Analysis	TO-15 (Chlorinated)				

ERT/SERAS
Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

Lockheed Martin - SERAS
Edison, NJ

WA: 130
WAM: Jeff Catanzarita
SERAS Contact: Michael
Cartwright

Sample #	0-130-1010	0-130-1011	0-130-1012	0-130-1013	0-130-1014
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	S2B-IA1	S2B-IA1	EQP-SS1	EQP-SS2	EQP-IA1
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	14070	206	63	228	245
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	7:03:00 AM	7:03:00 AM	7:57:00 AM	7:59:00 AM	7:58:00 AM
Stop Time	6:42:00 AM	6:42:00 AM	7:40:00 AM	7:38:00 AM	7:48:00 AM
Matrix	Air	Air	Soil Gas	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-5	-5	-4	-5	-3
Orifice_ID	14045	13925	13991	13789	13926
Analysis	TO-15 (Chlorinated)	TO-15 (Chlorinated)	TO-15 (Full List)	TO-15 (Full List)	TO-15 (Full List)

Sample #	0-130-1015	0-130-1016	0-130-1017	0-130-1018	0-130-1019
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	EQP-IA1	EQP-IA3	EQP-IA2	EQP-SS3	EQP-SS4
Media	SUMMA Canister				
Pump #	118	258	201	3	220
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	7:58:00 AM	7:57:00 AM	7:58:00 AM	7:55:00 AM	8:05:00 AM
Stop Time	7:48:00 AM	7:44:00 AM	7:46:00 AM	7:36:00 AM	7:30:00 AM
Matrix	Air	Air	Air	Soil Gas	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-3	-2	-5	-4	-2
Orifice_ID	14006	13908	13947	14015	13998
Analysis	TO-15 (Full List)				

ERT/SERAS
Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

Lockheed Martin - SERAS
Edison, NJ

WA: 130
WAM: Jeff Catanzarita
SERAS Contact: Michael
Cartwright

Sample #	0-130-1020	0-130-1021	0-130-1022	0-130-1023	0-130-1024
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	EQP-SS5	EQP-SS6	EQP-SS7	EQP-IA5	EQP-IA4
Media	SUMMA Canister				
Pump #	14073	182	266	260	14069
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	8:01:00 AM	8:00:00 AM	8:00:00 AM	8:00:00 AM	7:55:00 AM
Stop Time	7:28:00 AM	7:32:00 AM	7:34:00 AM	7:52:00 AM	7:50:00 AM
Matrix	Soil Gas	Soil Gas	Soil Gas	Air	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-5	-6	-4	-2	-5
Orifice_ID	13778	13988	13990	14004	13793
Analysis	TO-15 (Full List)				

Sample #	0-130-1025	0-130-1026	0-130-1027	0-130-1028	0-130-1029
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	EQP-AMB1	EQP-AMB2	EQP-AMB3	EQP-AMB4	EQP-AMB5
Media	SUMMA Canister				
Pump #	193	45	75	59	180
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	8:14:00 AM	8:18:00 AM	8:30:00 AM	8:30:00 AM	8:34:00 AM
Stop Time	8:14:00 AM	8:18:00 AM	8:24:00 AM	8:24:00 AM	8:32:00 AM
Matrix	Air	Air	Air	Air	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-4	-4	-3	-2	-9
Orifice_ID	13932	13781	14049	13987	13802
Analysis	TO-15 (Full List)				

ERT/SERAS
Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

Lockheed Martin - SERAS
Edison, NJ

WA: 130
WAM: Jeff Catanzarita
SERAS Contact: Michael
Cartwright

Sample #	0-130-1030	0-130-1031	0-130-1032	0-130-1033	0-130-1034
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	S2B-AMB1	S2B-AMB2	S2B-AMB3	EQP-SS8	EQP-IA6
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	238	14068	27	144	213
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	8:50:00 AM	8:52:00 AM	8:56:00 AM	9:32:00 AM	9:32:00 AM
Stop Time	8:48:00 AM	8:50:00 AM	8:45:00 AM	9:30:00 AM	9:30:00 AM
Matrix	Air	Air	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-4	-6	-8	-5	-4
Orifice_ID	13995	14027	13792	14036	13786
Analysis	TO-15 (Chlorinated)	TO-15 (Chlorinated)	TO-15 (Chlorinated)	TO-15 (Full List)	TO-15 (Full List)

Sample #	0-130-1035	0-130-1036	0-130-1037	0-130-1038	0-130-1039
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	EQP-IA7	EQP-IA7	EQP-SS9	EQP-IA8	EQP-SS10
Media	SUMMA Canister				
Pump #	8	186	222	138	236
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	9:31:00 AM	9:31:00 AM	9:30:00 AM	9:30:00 AM	10:25:00 AM
Stop Time	9:32:00 AM	9:32:00 AM	9:32:00 AM	9:34:00 AM	10:18:00 AM
Matrix	Air	Air	Soil Gas	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-5	-6	-1	-4	-7
Orifice_ID	13993	13952	13906	14048	13944
Analysis	TO-15 (Full List)				

ERT/SERAS
Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

Lockheed Martin - SERAS
Edison, NJ

WA: 130
WAM: Jeff Catanzarita
SERAS Contact: Michael
Cartwright

Sample #	0-130-1040	0-130-1041	0-130-1042	0-130-1043	0-130-1044
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	EQP-IA9	DEC-SS3	DEC-SS4	DEC-SS5	DEC-IA1
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	200	70	76	166	97
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	10:25:00 AM	10:42:00 AM	10:45:00 AM	10:48:00 AM	10:48:00 AM
Stop Time	10:18:00 AM	10:40:00 AM	10:42:00 AM	10:36:00 AM	10:36:00 AM
Matrix	Air	Soil Gas	Soil Gas	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-5	-5	-5	-5	-5
Orifice_ID	13782	13946	13911	13912	14010
Analysis	TO-15 (Full List)	TO-15 (Chlorinated)	TO-15 (Chlorinated)	TO-15 (Chlorinated)	TO-15 (Chlorinated)

Sample #	0-130-1045	0-130-1046	0-130-1047	0-130-1048	0-130-1049
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	DEC-IA2	DEC-AMB1	DEC-SS1	DEC-SS2	DEC-IA3
Media	SUMMA Canister				
Pump #	129	149	19	24	215
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	10:53:00 AM	11:00:00 AM	11:01:00 AM	11:10:00 AM	11:14:00 AM
Stop Time	10:44:00 AM	11:00:00 AM	10:50:00 AM	10:52:00 AM	10:53:00 AM
Matrix	Air	Air	Soil Gas	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-5	0	-4	-5	-5
Orifice_ID	13794	13958	13795	14008	14023
Analysis	TO-15 (Chlorinated)				

ERT/SERAS
Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

Lockheed Martin - SERAS
Edison, NJ

WA: 130
WAM: Jeff Catanzarita
SERAS Contact: Michael
Cartwright

Sample #	0-130-1050	0-130-1051	0-130-1052	0-130-1053	0-130-1054
EventID	27-Feb	27-Feb	27-Feb	27-Feb	27-Feb
Location	CRPDC-IA1	CRPDC-SS3	CRPDC-SS1	CRPDC-SS2	CRPDC-IA2
Media	SUMMA Canister				
Pump #	10	160	112	119	47
Stop Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012
Start Time	11:37:00 AM	11:43:00 AM	11:47:00 AM	11:50:00 AM	11:51:00 AM
Stop Time	11:20:00 AM	11:20:00 AM	11:21:00 AM	11:22:00 AM	11:23:00 AM
Matrix	Air	Soil Gas	Soil Gas	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-5	-4	-3	-4	-4
Orifice_ID	13762	13929	14047	13989	14000
Analysis	TO-15 (Chlorinated)				

Sample #	0-130-1055	0-130-1056	0-130-1057	0-130-1058	0-130-1059
EventID	27-Feb	27-Feb	27-Feb	Summa Mar 12	Summa Mar 12
Location	CRPDC-AMB1	Trip Blank	Trip Blank	MHS-SS1	MHS-IA1
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	74	54	219	219	261
Stop Date	3/1/2012	3/1/2012	3/2/2012	3/21/2012	3/21/2012
Start Time	11:52:00 AM			8:04:00 AM	8:05:00 AM
Stop Time	11:24:00 AM	1:00:00 PM	12:00:00 PM	8:20:00 AM	8:20:00 AM
Matrix	Air	Air	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-4			-2.5	-1.5
Orifice_ID	14029			13928	14005
Analysis	TO-15 (Chlorinated)	TO-15 (Full List)	TO-15 (Full List)	TCE, PCE plus 12	TCE, PCE plus 12

ERT/SERAS
Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

Lockheed Martin - SERAS
Edison, NJ

WA: 130
WAM: Jeff Catanzarita
SERAS Contact: Michael
Cartwright

Sample #	0-130-1060	0-130-1061	0-130-1062	0-130-1063	0-130-1064
EventID	Summa Mar 12				
Location	MHS-IA2	MHS-SS2	MHS-IA3	MHS-SS3	MHS-IA4
Media	SUMMA Canister				
Pump #	14218	12	173	193	209
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	8:05:00 AM	8:09:00 AM	8:09:00 AM	8:14:00 AM	8:14:00 AM
Stop Time	8:20:00 AM	8:26:00 AM	8:26:00 AM	8:33:00 AM	8:33:00 AM
Matrix	Air	Soil Gas	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-6	-0.5	-0.5	-2.5	-8
Orifice_ID	13787	13914	13782	13916	14001
Analysis	TCE, PCE plus 12				

Sample #	0-130-1065	0-130-1066	0-130-1067	0-130-1068	0-130-1069
EventID	Summa Mar 12				
Location	MHS-SS4	MHS-IA5	MHS-SS5	MHS-IA6	MHS-SS6
Media	SUMMA Canister				
Pump #	57	231	257	66	14069
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	8:18:00 AM	8:17:00 AM	8:25:00 AM	8:24:00 AM	8:29:00 AM
Stop Time	8:38:00 AM	8:38:00 AM	8:43:00 AM	8:43:00 AM	8:52:00 AM
Matrix	Soil Gas	Air	Soil Gas	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-0.5	-2	-3.5	-4	-3
Orifice_ID	14041	14019	1379	13953	13921
Analysis	TCE, PCE plus 12				

ERT/SERAS
Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

Lockheed Martin - SERAS
Edison, NJ

WA: 130
WAM: Jeff Catanzarita
SERAS Contact: Michael
Cartwright

Sample #	0-130-1070	0-130-1071	0-130-1072	0-130-1073	0-130-1074
EventID	Summa Mar 12				
Location	MHS-IA7	MHS-SS7	MHS-IA8	MHS-AMB1	MHS-AMB2
Media	SUMMA Canister				
Pump #	179	224	26	148	239
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	8:29:00 AM	8:33:00 AM	8:34:00 AM	8:43:00 AM	8:45:00 AM
Stop Time	8:52:00 AM	8:48:00 AM	8:48:00 AM	9:01:00 AM	9:05:00 AM
Matrix	Air	Soil Gas	Air	Air	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-4.5	-1	-1.5	-2	-2
Orifice_ID	13798	14037	13960	14015	13942
Analysis	TCE, PCE plus 12				

Sample #	0-130-1075	0-130-1076	0-130-1077	0-130-1078	0-130-1079
EventID	Summa Mar 12				
Location	CSA-SS1	CSA-IA1	CSA-SS2	CSA-IA2	CSA-SS3
Media	SUMMA Canister				
Pump #	263	5	152	178	1131
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	9:25:00 AM	9:25:00 AM	9:27:00 AM	9:26:00 AM	9:27:00 AM
Stop Time	9:35:00 AM	9:35:00 AM	9:39:00 AM	9:39:00 AM	9:44:00 AM
Matrix	Soil Gas	Air	Soil Gas	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-4	-7	-3.5	-3	-1
Orifice_ID	13933	13784	13948	13802	14004
Analysis	TCE, PCE plus 6				

ERT/SERAS
Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

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WA: 130
WAM: Jeff Catanzarita
SERAS Contact: Michael
Cartwright

Sample #	0-130-1080	0-130-1081	0-130-1082	0-130-1083	0-130-1084
EventID	Summa Mar 12				
Location	CSA-IA3	CSA-SS4	CSA-IA4	CSA-SS5	CSA-IA5
Media	SUMMA Canister				
Pump #	68	79	147	34	37
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	9:29:00 AM	9:33:00 AM	9:33:00 AM	9:37:00 AM	9:37:00 AM
Stop Time	9:44:00 AM	9:52:00 AM	9:52:00 AM	9:57:00 AM	9:57:00 AM
Matrix	Air	Soil Gas	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-3	-3	-0.5	-2	-3.5
Orifice_ID	14020	14035	13912	13785	13795
Analysis	TCE, PCE plus 6				

Sample #	0-130-1085	0-130-1086	0-130-1087	0-130-1088	0-130-1089
EventID	Summa Mar 12				
Location	CSA-SS6	CSA-IA6	CSA-SS7	CSA-IA7	CSA-IA8
Media	SUMMA Canister				
Pump #	213	137	159	75	242
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	9:40:00 AM	9:41:00 AM	9:44:00 AM	9:47:00 AM	9:47:00 AM
Stop Time	10:02:00 AM	10:02:00 AM	10:07:00 AM	10:07:00 AM	10:07:00 AM
Matrix	Soil Gas	Air	Soil Gas	Air	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-3	-3	-2.5	-3	-1
Orifice_ID	13922	13776	14050	13777	13943
Analysis	TCE, PCE plus 6				

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Air Sampling Work Sheet

Site: Cabo Rojo
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Cartwright

Sample #	0-130-1090	0-130-1091	0-130-1092	0-130-1093	0-130-1094
EventID	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12
Location	CSA-AMB	FH-SS	FH-IA	44A-SS	44A-IA
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	238	118	103	186	222
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	9:54:00 AM	10:33:00 AM	10:33:00 AM	10:42:00 AM	10:42:00 AM
Stop Time	9:48:00 AM	10:48:00 AM	10:48:00 AM	10:51:00 AM	10:51:00 AM
Matrix	Air	Soil Gas	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-3	-4	-3	-3.5	-2.5
Orifice_ID	13765	13767	13918	13937	14023
Analysis	TCE, PCE plus 6	TCE, PCE plus 12			

Sample #	0-130-1095	0-130-1096	0-130-1097	0-130-1098	0-130-1099
EventID	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12
Location	44B-SS	44B-IA	NC-SS	NC-IA	53DC-SS
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	119	47	107	206	157
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	10:46:00 AM	10:46:00 AM	11:13:00 AM	11:13:00 AM	11:24:00 AM
Stop Time	10:56:00 AM	10:56:00 AM	11:09:00 AM	11:09:00 AM	11:17:00 AM
Matrix	Soil Gas	Air	Soil Gas	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-4.5	-2	-4.5	-3	-4
Orifice_ID	13935	13764	14038	14012	13991
Analysis	TCE, PCE plus 12	TCE, PCE plus 12	TCE, PCE plus 6	TCE, PCE plus 6	TCE, PCE plus 6

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Site: Cabo Rojo
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Sample #	0-130-1100	0-130-1101	0-130-1102	0-130-1103	0-130-1104
EventID	Summa Mar 12				
Location	53DC-IA	10AF-SS	10AF-IA	10AF-AMB	12AF-SS
Media	SUMMA Canister				
Pump #	43	255	59	14251	130
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	11:24:00 AM	11:30:00 AM	11:30:00 AM	11:35:00 AM	11:37:00 AM
Stop Time	11:17:00 AM	11:27:00 AM	11:27:00 AM	11:27:00 AM	11:33:00 AM
Matrix	Air	Soil Gas	Air	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-8	-4.5	-3	-2.5	-4
Orifice_ID	13793	13915	13986	13779	13941
Analysis	TCE, PCE plus 6				

Sample #	0-130-1105	0-130-1106	0-130-1107	0-130-1108	0-130-1109
EventID	Summa Mar 12				
Location	12AF-IA	3AF-SS	3AF-IA1	3AF-IA2	52H-SS
Media	SUMMA Canister				
Pump #	25	243	10	191	63
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	11:37:00 AM	11:44:00 AM	11:46:00 AM	11:46:00 AM	11:52:00 AM
Stop Time	11:33:00 AM	11:43:00 AM	11:43:00 AM	11:43:00 AM	11:54:00 AM
Matrix	Air	Soil Gas	Air	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-3.5	-3.5	-3	-2.5	-3.5
Orifice_ID	13993	13925	13983	13996	13778
Analysis	TCE, PCE plus 6				

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Air Sampling Work Sheet

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Sample #	0-130-1110	0-130-1111	0-130-1112	0-130-1113	0-130-1114
EventID	Summa Mar 12				
Location	52H-IA	8AF-SS	8AF-IA	55H-SS	55H-IA
Media	SUMMA Canister				
Pump #	14220	97	156	65	8
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	11:52:00 AM	12:00:00 PM	12:00:00 PM	12:05:00 PM	12:07:00 PM
Stop Time	11:54:00 AM	11:49:00 AM	11:49:00 AM	12:03:00 PM	12:03:00 PM
Matrix	Air	Soil Gas	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-0.5	-4	-3.5	-4	-2.5
Orifice_ID	13954	14026	13792	13762	13801
Analysis	TCE, PCE plus 6				

Sample #	0-130-1115	0-130-1116	0-130-1117	0-130-1118	0-130-1119
EventID	Summa Mar 12				
Location	53H-SS	53H-IA	53C-SS	53C-IA	49C-SS
Media	SUMMA Canister				
Pump #	192	14070	7	280	203
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	12:12:00 PM	12:13:00 PM	1:38:00 PM	1:39:00 PM	1:44:00 PM
Stop Time	12:10:00 PM	12:10:00 PM	3:41:00 PM	3:41:00 PM	1:36:00 PM
Matrix	Soil Gas	Air	Soil Gas	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-1	-3	-4	-5	-5
Orifice_ID	13998	13995	14010	13919	13952
Analysis	TCE, PCE plus 6				

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Air Sampling Work Sheet

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Sample #	0-130-1120	0-130-1121	0-130-1122	0-130-1123	0-130-1124
EventID	Summa Mar 12				
Location	49C-IA	51C-SS	51C-IA	46C-SS	46C-IA1
Media	SUMMA Canister				
Pump #	216	101	180	264	36
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	1:46:00 PM	1:51:00 PM	1:51:00 PM	1:57:00 PM	1:59:00 PM
Stop Time	1:36:00 PM	1:52:00 PM	1:52:00 PM	1:45:00 PM	1:45:00 PM
Matrix	Air	Soil Gas	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-4	-4.5	-3	-4.5	-2
Orifice_ID	14044	13939	13769	13917	13962
Analysis	TCE, PCE plus 6				

Sample #	0-130-1125	0-130-1126	0-130-1127	0-130-1128	0-130-1129
EventID	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12
Location	46C-IA2	50H-SS	50H-IA	I15-SS	I15-IA
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	150	13	27	40	211
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	1:59:00 PM	2:09:00 PM	2:09:00 PM	2:25:00 PM	2:26:00 PM
Stop Time	1:45:00 PM	1:59:00 PM	1:59:00 PM	2:22:00 PM	2:22:00 PM
Matrix	Air	Soil Gas	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-2	-5	-2	-4	-3.5
Orifice_ID	13997	14008	14013	13920	14030
Analysis	TCE, PCE plus 6	TCE, PCE plus 6	TCE, PCE plus 6	TCE, PCE plus 12	TCE, PCE plus 12

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Air Sampling Work Sheet

Site: Cabo Rojo
Cabo Rojo, PR

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Sample #	0-130-1130	0-130-1131	0-130-1132	0-130-1133	0-130-1134
EventID	Summa Mar 12				
Location	J3-SS	J3-IA1	J3-IA2	J4-SS	J4-IA
Media	SUMMA Canister				
Pump #	176	182	14224	194	274
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	2:32:00 PM	2:34:00 PM	2:34:00 PM	2:40:00 PM	2:41:00 PM
Stop Time	2:28:00 PM	2:28:00 PM	2:28:00 PM	2:36:00 PM	2:36:00 PM
Matrix	Soil Gas	Air	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-27	-4.5	-29	-5.5	-4
Orifice_ID	13949	14040	13768	13994	14018
Analysis	TCE, PCE plus 12				

Sample #	0-130-1135	0-130-1136	0-130-1137	0-130-1138	0-130-1139
EventID	Summa Mar 12				
Location	L-SS	L-IA	PS-AMB	PS-SS1	PS-IA1
Media	SUMMA Canister				
Pump #	96	139	78	120	62
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	3:00:00 PM	3:04:00 PM	3:31:00 PM	3:23:00 PM	3:25:00 PM
Stop Time	2:46:00 PM	2:46:00 PM	3:00:00 PM	2:51:00 PM	2:51:00 PM
Matrix	Soil Gas	Air	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-5.5	-4.5	-3.5	-5	-3
Orifice_ID	13995	13985	13760	14000	14027
Analysis	TCE, PCE plus 12				

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Air Sampling Work Sheet

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SERAS Contact: Michael
Cartwright

Sample #	0-130-1140	0-130-1141	0-130-1142	0-130-1143	0-130-1144
EventID	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12
Location	PS-SS2	PS-IA2	Trip Blank	PFCS-SS1	PFCS-IA1
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	32	236		14240	115
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	3:27:00 PM	3:28:00 PM		8:02:00 AM	8:02:00 AM
Stop Time	2:56:00 PM	2:56:00 PM	4:36:00 PM	8:34:00 AM	8:34:00 AM
Matrix	Soil Gas	Air	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-5.5	-4.5	-30	-6	-2
Orifice_ID	13947	13927	na	14007	14029
Analysis	TCE, PCE plus 12	TCE, PCE plus 12	TCE, PCE plus 12	TCE, PCE plus 6	TCE, PCE plus 6

Sample #	0-130-1145	0-130-1146	0-130-1147	0-130-1148	0-130-1149
EventID	Summa Mar 12				
Location	PFCS-SS2	PFCS-IA2	PFCS-SS3	PFCS-IA3	PFCS-SS4
Media	SUMMA Canister				
Pump #	14230	19	138	111	195
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	8:08:00 AM	8:08:00 AM	8:17:00 AM	8:17:00 AM	8:23:00 AM
Stop Time	8:38:00 AM	8:38:00 AM	8:44:00 AM	8:44:00 AM	8:48:00 AM
Matrix	Soil Gas	Air	Soil Gas	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-6.5	-1.5	-6.5	-2.5	-6
Orifice_ID	13780	13799	13913	13908	14032
Analysis	TCE, PCE plus 6				

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Air Sampling Work Sheet

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Sample #	0-130-1150	0-130-1151	0-130-1152	0-130-1153	0-130-1154
EventID	Summa Mar 12				
Location	PFCS-IA4	PFCS-IA5	PFCS-SS5	PFCS-IA6	PFCS-SS6
Media	SUMMA Canister				
Pump #	223	1138	104	184	24
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	8:23:00 AM	8:23:00 AM	8:36:00 AM	8:36:00 AM	8:45:00 AM
Stop Time	8:48:00 AM	8:48:00 AM	8:54:00 AM	8:54:00 AM	9:04:00 AM
Matrix	Air	Air	Soil Gas	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-3	-2.5	-11.5	-3	-6
Orifice_ID	13906	13990	13923	13766	13929
Analysis	TCE, PCE plus 6				

Sample #	0-130-1155	0-130-1156	0-130-1157	0-130-1158	0-130-1159
EventID	Summa Mar 12				
Location	PFCS-IA7	PFCS-SS7	PFCS-IA8	PFCS-AMB	I12-SS
Media	SUMMA Canister				
Pump #	11508	241	14246	22	12625
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	8:45:00 AM	8:41:00 AM	8:41:00 AM	8:48:00 AM	10:16:00 AM
Stop Time	9:04:00 AM	8:59:00 AM	8:59:00 AM	9:07:00 AM	12:05:00 PM
Matrix	Air	Soil Gas	Air	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-3	-7.5	-2.5	-2.5	-6
Orifice_ID	13911	13936	13761	13781	13789
Analysis	TCE, PCE plus 6	TCE, PCE plus 12			

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Cartwright

Sample #	0-130-1160	0-130-1161	0-130-1162	0-130-1163	0-130-1164
EventID	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12
Location	I12-IA	15CX-SS	15CX-IA1	15CX-IA2	115ACX-SS
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	200	256	14068	14072	23
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	10:16:00 AM	1:38:00 PM	1:38:00 PM	1:38:00 PM	1:49:00 PM
Stop Time	12:05:00 PM	1:35:00 PM	1:35:00 PM	1:35:00 PM	1:44:00 PM
Matrix	Air	Soil Gas	Air	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-5	-7	-4	-5.5	-6
Orifice_ID	14016	13782	14039	13790	13988
Analysis	TCE, PCE plus 12	TCE, PCE plus 6			

Sample #	0-130-1165	0-130-1166	0-130-1167	0-130-1168	0-130-1169
EventID	Summa Mar 12				
Location	115ACX-IA	13CX-SS	13CX-IA	CX6-SS	CX6-IA
Media	SUMMA Canister				
Pump #	53	55	260	14	181
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	1:49:00 PM	1:54:00 PM	1:54:00 PM	2:00:00 PM	2:00:00 PM
Stop Time	1:44:00 PM	1:50:00 PM	1:50:00 PM	1:57:00 PM	1:57:00 PM
Matrix	Air	Soil Gas	Air	Soil Gas	Air
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-6	-5	-5.5	-5	-30
Orifice_ID	13775	13794	14003	14011	14024
Analysis	TCE, PCE plus 6				

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SERAS Contact: Michael
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Sample #	0-130-1170	0-130-1171	0-130-1172	0-130-1173	0-130-1174
EventID	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12	Summa Mar 12
Location	115ACX-AMB	J1-SS	J1-IA1	J1-IA2	J2-SS
Media	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister	SUMMA Canister
Pump #	70	226	170	14223	215
Stop Date	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Start Time	2:05:00 PM	2:19:00 PM	2:19:00 PM	2:19:00 PM	2:25:00 PM
Stop Time	1:44:00 PM	2:21:00 PM	2:21:00 PM	2:21:00 PM	3:06:00 PM
Matrix	Air	Soil Gas	Air	Air	Soil Gas
Start_Pressure	-30	-30	-30	-30	-30
Stop_Pressure	-7	-7	-5	-30	-5.5
Orifice_ID	13946	13939	14034	14021	13934
Analysis	TCE, PCE plus 6	TCE, PCE plus 12			

Sample #	0-130-1175	0-130-1176			
EventID	Summa Mar 12	Summa Mar 12			
Location	J2-IA	J2-AMB			
Media	SUMMA Canister	SUMMA Canister			
Pump #	71	81			
Stop Date	3/21/2012	3/21/2012			
Start Time	2:25:00 PM	2:25:00 PM			
Stop Time	3:06:00 PM	3:06:00 PM			
Matrix	Air	Air			
Start_Pressure	-30	-30			
Stop_Pressure	-6	-6			
Orifice_ID	14048	13788			
Analysis	TCE, PCE plus 12	TCE, PCE plus 12			

APPENDIX C
Confidential Unit to Address Key
Cabo Rojo Site
Cabo Rojo, PR
May 2012

Appendix C
 Confidential Unit to Address Key
 March and February 2012
 Cabo Rojo Site
 Cabo Rojo, Puerto Rico
 May 2012

Unit	Location on Figures 6 and 7	Location	Address	Remarks
1	1.1	CRPDC-SS1	50 Carbonell St.	Cabo Rojo Professional Dry Cleaners
	1.2	CRPDC-SS2		
	1.3	CRPDC-SS3		
2	2.1 (NA)	DEC-SS1	Road 307 Intersection 100	D'Elegant Dry Cleaners
	2.2 (NA)	DEC-SS2		
	2.3 (NA)	DEC-SS3		
	2.4 (NA)	DEC-SS4		
	2.5 (NA)	DEC-SS5		
3	3A.1	EQP-SS1	Centro Comercial Ana Maria	Unit 3A - Head Start Unit 3B - Extasy Q Prints Unit 3C - Modeling School
	3A.2	EQP-SS2		
	3A.3	EQP-SS3		
	3A.4	EQP-SS4		
	3A.5	EQP-SS5		
	3A.6	EQP-SS6		
	3A.7	EQP-SS7		
	3B.1	EQP-SS8		
	3B.2	EQP-SS9		
	3C.1	EQP-SS10		
4	4.1	S2A-SS2	17 ext. Carbonell St.	Former Serrano Dry Cleaners 2
	4.2	S2A-SS3		
	4.3	S2A-SS4		
5	5.1	S2B-SS1	15 ext. Carbonell St.	Colegio Mafalda
	5.2	S2B-SS2		
	5.3	S2B-SS3		
6	6.1	CSA-SS1	Urb. Margarita, Número 2, Calle Baldorioty	Collegio de San Agustin
	6.2	CSA-SS2		
	6.3	CSA-SS3		
	6.4	CSA-SS4		
	6.5	CSA-SS5		
	6.6	CSA-SS6		
	6.7	CSA-SS7		
7	7.1	MHS-SS1	Calle Barbosa Norte Urb Ana Maria	Ines Maria Mendoza High Schoool
	7.2	MHS-SS2		
	7.3	MHS-SS3		
	7.4	MHS-SS4		
	7.5	MHS-SS5		
	7.6	MHS-SS6		
	7.7	MHS-SS7		
8	8.1	PFCS-SS1	Calle Rius Rivera Final	Pedro Fidel Colberg School
	8.2	PFCS-SS2		
	8.3	PFCS-SS3		
	8.4	PFCS-SS4		
	8.5	PFCS-SS5		
	8.6	PFCS-SS6		
	8.7	PFCS-SS7		
9	9.1	PS-SS1	Calle José De Diego, al lado del tribunal	Police Station by EQP
	9.2	PS-SS2		
10	10	15CX-SS	15 Calle Ext. Carbonell	-
11	11	3AF-SS	3 Angel Franco (Urb Ciboa)	-
12	12	44A-SS	44 A Jose DeDiego	Department of Education Warehouse
13	13	44B-SS	44 B Jose DeDiego	Experience Works

Appendix C (continued)
 Confidential Unit to Address Key
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14	14	46C-SS	46 Carbonell	-
15	15	49C-SS	49 Carbonell	-
16	16	50H-SS	50 Calle Hostos	-
17	17	51C-SS	51 Carbonell	Vacant business / retail shop
18	18	52H-SS	52 Calle Hostos	-
19	19	53C-SS	53 Carbonell	Retail shop
20	20	53DC-SS	53 Carbonell	Dr Office
21	21	53H-SS	53 Calle Hostos	-
22	22	55H-SS	55 Calle Hostos	-
23	23	8AF-SS	8 Angel Franco (Urb Ciboa)	-
24	24	10AF-SS	10 Angel Franco (Urb Ciboa)	-
25	25	CX6-SS	6 Calle Ext. Carbonell	-
26	26	FH-SS	Calle Barbosa Final	Fire House by EQP
27	27	I12-SS	I12 Calle 2	-
28	28	I15-SS	I15 Calle 2	-
29	29	J1-SS	J1 Calle 2	-
30	30	J2-SS	J2 Calle 2	-
31	31	J3-SS	J3 Calle 2	-
32	32	J4-SS	J4 Calle 2	-
33	33	L-SS	Calle Jose de Diego #43	Library
34	34	115ACX-SS	11 (5A) Calle Ext. Carbon	-
35	35	NC-SS	56 Carbonell	Nuevo China
36	36	12AF-SS	12 Angel Franco (Urb Ciboa)	-
37	37	13CX-SS	13 Calle Ext. Carbonell	-

Notes:

48 Carbonell (48C) does not appear on Figures 6 or 7, as no sub-slab sample was collected at this location. The indoor air sample location can be found on Figure 3.

NA: Unit 2 (DElegant Dry Cleaners) does not appear on Figures 6 or 7, as it is not in the area of concern that was sampled during both mobilizations. Sample locations for this Unit can be found on Figure 4.